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An evaluation model for state mandated educational rehabilitation programs in higher education

by

Linda Ann Tigges

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CHAPTER I. INTRODUCTION

One of the results of the public community college movement has been the assignment of functions to community colleges that were previously not found in institutions of higher education. As the Newman Report on Higher Education pointed out in 1971, "The junior college 'scenario' is thus one of transformation of community institutions into two year institutions which serve a number of interests other than students." (47, p. 59) For many reasons, the wide range of functions bring special problems to the community colleges. Among other problems one particular difficulty that the community colleges face is how to provide some kind of evaluation or accountability for a large number of programs, many of which may differ widely in purpose and method.

One of the functions that has recently been assigned to many community colleges is provision of courses mandated by the state that serve as a substitute for and/or an addition to penal sanctions. These courses have especially been mandated for improper driving or more often, for drinking while driving. These courses usually have very specific goals, which are set forth in state statuatory or administrative law. The attainment of these goals is the concern of public policy makers outside the educational

institution, such as state legislators or law enforcement officials.

Because of these unique characteristics, the evaluation of class performance provides difficulties for community college administrators. Some of the difficulties are similar to those any post-secondary educational administrator confronts, such as attempting to evaluate whether the class content, teaching methods, and materials are adequate. However, some of the problems are quite different. They are different, as suggested above, because of the very specific purpose assigned to the class, and the attention given by public policy makers. They are also different because the population of these courses is unique, since it is composed almost entirely of persons who are required by the courts to be there. In evaluating the program, the administrator must gather information to determine whether or not the specific behavior of the class participants changed in the way in which it was intended. This information must be gathered from students who may be reluctant to admit they were required to enroll in the course and from members of police and judicial departments who may not particularly approve of this educational alternative and who are not prepared to provide the kinds of information the educational evaluators request. In addition, all of this information must be gathered without violating the

privacy rights of the students, but must be comprehensive enough to satisfy the inquiries of public policy makers.

These problems alone are probably enough to make most post-secondary education administrators uncomfortable. In addition, there are very few evaluation models or guidelines that can provide information about solving these problems. Most evaluation models are oriented toward solving problems of evaluation within systems of education, government and industry. There are very few that can be used to evaluate programs that are in both the educational and governmental systems.

The purpose of this study is to provide a solution for this evaluation problem; to provide a theoretical and operational model for carrying out an evaluation of a state-mandated educational rehabilitation program, such as that of the drinking drivers' program; and to test the model on a specific program, the Iowa Drinking Drivers Course.

The following chapters provide a more thorough description of the study. First, however, background will be provided through a presentation of the ways in which institutional education programs were alternated for or supplemented penal sanctions and of the ways in which demands were made by policy makers for evaluation of programs such as educational rehabilitation. The objectives, assumptions and constraints governing the study will also be discussed

as well as the operational definitions used throughout.

Education and Penal Sanctions

In many educational institutions, classes are now being taught which add to or are alternatives for penal sanctions. The existence of these classes is relatively recent, appearing only after it was accepted that criminals should be reformed rather than merely punished, and that reform could be brought about through modifications of penal sanctions.

The idea that punishment could be used not only to deter criminals, but also to change their behavior and reform them, is not particularly new. According to criminologists, E. H. Sutherland and D. R. Cressy, members of the late 19th Century Positivist School of Criminology, reform of criminals was as essential a part of punishment as was segregation from society (63, p. 303). In the 1930's and 1940's scholars such as John Dewey, a theorist acclaimed by criminologists and educators alike, began to point out that people do not necessarily avoid certain behavior because of the fear of punishment. Psychologists such as John Thorndike developed experiments to show that positive reinforcers could be as powerful as negative ones. Criminologists suggested that criminal behavior is a

response to the larger environment in which the criminal exists, as well as being a response to individual needs. For example, W. H. Sutherland pointed out that individuals tend to learn and unlearn criminal behavior in personal intimate groups, especially when the identity of the individual is closely associated with the identity of the group, a process he called "differential association" (63, p. 410). Thorsten Sellin and Robert K. Merton discussed and tested theories that were based on the concept that crime is socially derived and that it could be part of a cultural, as well as individual, conflict (56; 41, pp. 361-379).

From these theories and experiments of psychologists, educators and criminologists, came the idea that while punishment might change behavior, it might also have counterproductive tendencies, such as psychological alienation or further deviant behavior; and that it might be ineffective because it does not change the environment within which the criminal functions.

As criminal reform through means other than punishment was accepted, alternatives to punitive treatment of criminals were found, such as clinical, group relations and community corrections and half-way house treatments. Education, as a part of individual or group therapy in an educational institution, also came to be used, attempting primarily to rehabilitate misdemeanants. This is because,

while misdemeanant crimes, like traffic offenses, drunkenness, shoplifting or bad check writing, had a high rate of recidivism, the crimes were not so serious as to warrant extensive rehabilitation or penalties (52, p. 493). It came to be seen that for these crimes, institutional education was a viable alternative to other punitive treatment. As a result, educational rehabilitation programs were set up at state and local levels.

One of the ways in which education in an educational setting has frequently been used as an alternative or addition to penal sanctions for adults is in the area of traffic safety or the area of driver improvement for the drinking driver. Drinking driver courses have been established in many states due to widespread concern about the number of accidents caused by drinking drivers, and about the fairness of requiring fines or license revocations from persons who may already have severe economic, personality, or other alcohol-related problems (45, p. 232). Programs also have been provided due to support from the federal government through Alcohol Safety Action Projects (ASAP). In Iowa, for example, drinking drivers' courses are required for most persons with first convictions for drinking while driving. The same is also true of other states, such as New York and Florida, and of many cities and counties, such as Phoenix, Baltimore, Indianapolis, and Hennepin County,

Minnesota.[1] In Iowa, New York, Florida, California and other areas, responsibility for the establishment and operation of these courses rests with the public community colleges.

Evaluation of State Programs

As ideas were accepted that education was an alternative to penal sanctions, so it became apparent that it was necessary to evaluate the success of these publicly financed programs.

This demand for comprehensive evaluation of public programs, such as educational rehabilitation is relatively new, especially at the state and local levels. One source suggested that interest in the evaluation of programs was given impetus through an effort to provide control for the large number of federal programs that originated in the 1930's and 1940's, and through efforts to determine the effectiveness of military programs during World War II (27, p. 102). After World War II, many of these control and effectiveness procedures were adopted by industry and nonmilitary sectors of the federal government (19, p. 74).

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[1]In January, 1975, the AAA (American Automobile Association) listed over 300 volunteer and required drinking driver rehabilitation schools in the U.S. and Canada.

These procedures were not adopted by state and local governments until the 1960's and 1970's. This is because until that time, state and local governments did not have large numbers of programs. In the 1960's and 1970's state and local governments expanded their programs, partly because of incentives supplied by federal revenue sharing and federal grants, and partly due to increased public reliance on state and local governments for services. One result of the expanded number of programs was increased costs to taxpayers. When these costs were further increased by inflation and pay raises for public employees, taxpayers, and the public officials representing them, began to demand evidence that the funds used in these programs had been used honestly and had been put to effective use. As public officials became aware that methods providing an indication of program effectiveness were available they began to demand and continue to demand that these methods be used to evaluate programs in state and local government.

One of the areas in which state and local governments are requiring program evaluations is in educational rehabilitation, specifically the drinking drivers' program. For the most part, it appears that these evaluations are required because the program is new; because the purpose of the program is one of concern; and because, in some cases, the program is expensive. In Iowa, state government

officials have developed guidelines for the operation of such a program, and they now request an evaluation of it from members of educational institutions.

Statement of the Problem

Requests by state government officials for an evaluation of a program like the drinking drivers' program involve certain problems for the educational institutions. Some of these programs have been discussed above. The primary problem, however, is that the evaluation is requested without provision of an evaluation model for members of the educational institutions. This is unfortunate since educators have had little experience carrying out evaluations of state mandated programs, especially those programs which are also part of the penal system. There simply is no evaluation model for educators that can manage information from a program operating within the educational, penal and state governments systems and that can return the kind of information members of these systems need. This study will be directed at solving this problem. The purposes and objectives, assumptions, and constraints of this study are listed below.

Purposes and objectives

1. A theoretical evaluation model for state mandated programs for educational rehabilitation in educational institutions will be developed.
   a. Use will be made of governmental and educational concepts of evaluation.
   b. The model will be designed to be used by community college or adult education administrators; to use information provided by the educational, penal and public policy-making bodies; and to provide information useful to those educational, penal, and public policy making bodies.
2. The model will be tested by evaluating a state mandated education rehabilitation class taught in Iowa's community colleges, the Drinking Drivers' Course.
   a. In testing the theoretical model, an operating model will be developed and guidelines and instruments for the evaluation provided.
   b. The operating model will be implemented.
   c. Results and conclusions of the Drinking Drivers' Course evaluation will be provided.
3. The model will be evaluated, and conclusions and recommendations about the model will be provided.

Assumptions

1. The theoretical evaluation model for state mandated educational rehabilitation can also be used for evaluation of state mandated programs in

higher education.

2. Evaluation of community college programs, such as the educational rehabilitation programs, will continue to be requested by educators and members of penal and public policy-making bodies.
3. Education rehabilitation courses like the Drinking Drivers' Course will continue to be mandated by the public policy-making bodies.
4. Access to information about educational rehabilitation programs like the Drinking Drivers' School will be no more limited by privacy laws in the future than at the present:

Constraints

1. Political tensions among state agencies constrained responses of state agencies to questions about the feasibility and effectiveness of the model.
2. The use of persons convicted of drinking and driving as a population on which to test the model limited the test as follows:
   a. Inaccuracies and inconsistencies within the state traffic records computer system, which provided a major source of information for the study, limited the study.

b. Follow-up mailings to certain groups of drinking drivers was not carried out becase it was considered "law enforcement harrassment" by some of them.

c. Randomly selected no-treatment control groups of drinking drivers could not be used because of concern by public officials about refusing treatment to any group of offenders.

d. Longitudinal studies indicating behavioral changes of drinking drivers were made impossible because of time and financial constraints.

3. Information on drinking drivers arrests was not available because of state privacy laws.

Definitions and Acronyms

ASAP - Alcohol Safety Action Project; demonstration alcohol counter-measure projects funded by the U.S. Department of Transportation (US DOT) for the purpose of reducing the number of persons driving while intoxicated.

BAC - Blood Alcohol Content

DOT - Department of Transportation (Iowa)

DPI - Department of Public Instruction

DPS - Department of Public Safety

Indictable misdemeanor - An event less than a felony, in which punishment exceeds a fine of $100 or imprisonment for 30 days. Cases are tried by full time judicial magistrates, district associate judges and occasionally by full district court judges.

OMVUI - Operating a Motor Vehicle While Under the Influence; official Iowa term used in drinking driver arrest and conviction records.

Recidivism - Subsequent conviction for an identical crime.

Revocation - Mandatory withdrawal of the driving privilege. To regain the privilege the driver must reapply and/or perform some substantive act.

Suspension - The driving privilege is suspended for a period of time, the length of which depends on the discretion of the judge. The driving privilege may be regained without reapplication.

TRACIS - Traffic Records and Criminal Justice Information System - Iowa computerized information system containing records of traffic and criminal convictions.

US DOT - United States Department of Transportation.

CHAPTER II. CRITIQUE OF LITERATURE AND DEVELOPMENT OF A MODEL

The purpose of this study to provide a model and guidelines for an evaluation of state mandated community college programs designed to serve as a substitute or supplement to penal sanctions. Additionally, the model will be tested through an evaluation of the Iowa Drinking Drivers' Course. Before carrying out either of these purposes, however, it is necessary to provide a review of the pertinent literature so as to point out those theories and studies that have been developed and carried out in this area, and to critique these theories and studies in light of the needs of this study. From this critique a model can be developed. Later chapters will provide guidelines for implementing the model as well as a test of it.

A review of the literature suggests that concepts about evaluation in education rest on theories and studies developed in the area of military, governmental, and industrial management, as well as in the educational sector. Thus, a discussion of evaluation concepts developed in these areas will be provided as well as the way in which these concepts can be used in this study.

Industrial, Military, and Governmental Evaluation Models

Industrial managers have long sought to increase productivity and limit costs by requiring some kind of accountability from personnel. In the 1940's and 1950's it became possible for concepts about management and accountability to become more sophisticated than before, using accountability procedures developed during World War II, newly developed computerized data systems, and information about scientific management that had been slowly accumulating since the turn of the century. By the 1960's and 1970's industrial evaluation models were used in the military and civilian government, and in education.

Many of these models relied upon the concepts of systems analysis, defined by Paul Dressel as "a way of explaining relationships among objects by looking at objects and their place and relationships in the system" (13, p. 82). Usually the object to be explained is an organization or a program; affective relationships include those with the environment outside the system, and those among structures and activities within the system. A frequently seen model for systems analysis of a program is seen in Figure 1.

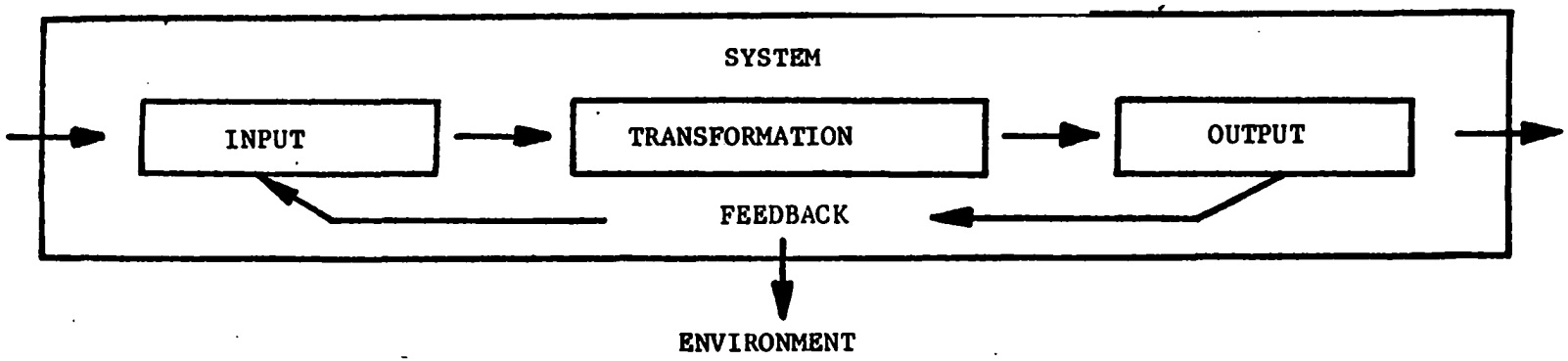

Figure 1. Systems analysis model

Three industrial-governmental accountability models frequently cited as influencing educational evaluation are Planning, Programming and Budgeting (PPB), Management by Objectives (MBO) and Program Auditing. These models are discussed below. PPB is, as its name suggests, primarily a way of relating the planning, budgeting and evaluation functions of an organization in terms of programs rather than in terms of departments or groupings of personnel. Developed by Rand Corporation and then Secretary of Defense MacNamara, and used in the Department of Defense in the 1960's, it is essentially a long-range budgeting and cost-effectiveness procedure (18, p. 172).

MBO is similar to PPB in that it also deals with planning and effectiveness; but it is primarily a participatory management technique, a way of including individuals and departments of an organization in program goal-setting and performance evaluation. Its principles were first set forth in written form in the 1950's and 1960's (14, 50).

An evaluation system frequently discussed in state government is Program Auditing. While the definition of program auditing seems to vary widely from state to state depending upon the way it is used, most of the literature agrees that it is a way of evaluating programs in state government according to the statuatory and administrative goals and according to cost efficiency (9). In many cases,

program auditing is a way of adapting the complexities of PPB to a situation where a minimal amount of data and staff time are available.

One additional evaluation system that has used many of the governmental and industrial concepts, but has been developed for use by institutions of higher education, is the National Center for Higher Education Management Systems (NCHEMS) outcome measurement model. While NCHEMS works in many other areas than evaluation, the organization has developed a series of technical reports dealing with outcome evaluations of post-secondary educational programs. In these reports, outcomes are defined as student growth and development, development of new knowledge and art forms, and community development and service; though at this time research has been carried out primarily on the student-growth and development outcomes (42, 43). An inventory of outcome variables and measures has been developed as well as a measures and procedures manual for determining outcomes (43). The evaluation model provided by NCHEMS suggests that evaluation must be an integral part of the planning and management cycle (43, p. 5). In this way it appears to be an adaptation of PPB and program auditing to the needs of higher education.

Many of the governmental and industrial evaluation con-

cepts, especially those of program auditing and the NCHEMS outcome model, are useful in an evaluation of an educational rehabilitation program like the Drinking Drivers' Course. The concepts provide an emphasis on productivity or outcomes information, and are oriented toward satisfying the demands of a public policy-making body. These qualities are essential when a program is mandated by such a body. The evaluation concepts are also useful in that they are oriented toward program, not classroom or organizational evaluation, and are intended to be carried out by administrators as well as teachers.

However, there are certain problems involved with adapting these models. One is that most of these systems are somewhat complicated and require a better data base and more technical expertise than a community college or even a state agency may have available. A second problem is that not all the important aspects of educational evaluation are included. Outcome information is emphasized, as it should be, but without regard for input and process evaluative information that teachers and administrators need to determine causes for outcomes and to improve the program.

Paul Dressel's comparison of accountability and educational evaluation seems useful in pointing out what is lacking. Dressel points out that the governmental-industrial

models are accountability oriented, accountability being defined as a production or output-oriented evaluation, that attempts to determine if resources were used for specified purposes according to specified practices or requirements (13, p. 75). He contrasts this to educational evaluation, which is less concerned about efficiency and resource utilization or "ends", but is more concerned with "means" or processes. Processes include the professional, but not necessarily required, behavior of the instructor and the responsible use of methods and choice of materials (13, p. 75). It would appear that administrators of educational rehabilitation programs like the Drinking Drivers' Course, need an accountability model of evaluation to satisfy evaluation demands coming from outside the educational institution; but that this must be combined with an educational model in order to satisfy needs within the educational sector.

Because the industrial-governmental models do not appear to be adequate, the following section on educational evaluation models is provided to determine what these models can offer to an evaluation of educational rehabilitation programs such as the Drinking Drivers' Course.

Educational Evaluation Models

According to Worthen and Sanders (79), the formal evaluation of educational programs began as early as 1897 with Joseph Rice's comparative study of the spelling performance of 30,000 school children (79, p. 2). In the 1920's educational evaluation assumed a measurement and testing approach; and it was only in the 1930's and 1940's that this approach changed to a broader assessment of student achievement and to program and institutional evaluation (2, p. 141). In the 1950's and 1960's, due to the Sputnik space race and evaluation requirements associated with federal grants provided by the Elementary and Secondary Education Act of 1965, interest in educational evaluation, especially at the elementary and secondary level accelerated. Large-scale evaluations in elementary and secondary education were carried out, such as the Coleman and Talent studies (79, p. 3). Pressure for evaluation in higher education became apparent in the 1960's and 1970's; and it was associated with public concern for increasing costs, political activism on college campuses, demands by minorities and women for equal access to education, and collective bargaining (79, p. 7).

Many evaluation approaches have been suggested to answer these pressures and demands for evaluation. How-

ever, in the past ten years, educational evaluation has been influenced by several conceptual evaluation models. Many of these conceptual models include elements from government and industrial management models and studies, but have been designed for the educational sector. Most of these models are geared to provide flexible, adaptable solutions to the school administrators' and teachers' evaluation problems.

Worthen and Sanders have attempted to classify and explain these models by placing them in the following three categories: judgment strategies; decision-management strategies; and decision-objective strategies (79, pp. 40-218). The first category, judgment categories, includes evaluation models in which the evaluator plays a professional or judgemental, but not necessarily decision making role (79, p. 43). Discussed in this category are Scriven's Pathway Comparison Model and formative-summative and intrinsic-payoff evaluation, and Robert T. Stake's Countenance of Education Evaluation Model and descriptive and judgmental evaluation differentiation.

In the decision-management category, which emphasizes evaluation for decision makers, Stufflebeam's Context, Input, Process and Product Evaluation Model (CIPP) is included, and Alkin's Evaluation Theory Model (79, p. 128).

The third category, decision-objective strategies, which emphasizes evaluation for developing and testing objectives, includes Robert Hammond's EPIC Evaluation Model and Malcolm Provus' Discrepancy Evaluation Model (79, p. 156).

Most of these models do attempt to combine certain governmental and industrial evaluation concepts, such as systems analysis and outcome measurement, with the more process "professional responsibility" oriented concepts of educational evaluation described by Dressel (13, p. 75). Because of this, they are of interest in providing an evaluation model for an educational rehabilitation program, since, as discussed above, an evaluation model for such a program must rely on both concepts. Because Stufflebeam's model appears to be especially appropriate for use in an educational program like the Drinking Drivers' Course, it is discussed below.

Stufflebeam's Revised Evaluation Model

Stufflebeam's CIPP model was placed by Worthen in the decision-management category, although his revision in 1971 added certain "judgemental" concepts to it (62). Stufflebeam originally defined evaluation as being primarily for the purpose of making decisions or, in his terms, for "judging decision alternatives" (79, p. 129). This definition reflects the purpose for which the CIPP

model was originally designed, that is, to help elementary and secondary school personnel plan and implement evaluations of federal projects (61, p. 117).

In developing his model, Stufflebeam pointed out that decisions were of several different kinds depending upon the degree of change about which decisions are to be made and upon the degree of rigidity or completeness of information upon which decisions were to be made (78, p. 130). He also pointed out that there were several types of evaluation, depending upon the roles for which the evaluation was used. These roles were placed in four different categories: 1. context role (evaluation of needs and problems; 2. input role (evaluation of alternatives available for use in the program); 3. process role (evaluation of alternative ways of implementing goals and objectives; and 4. product role (evaluation of attainments) (61, p. 121). The steps involved in any of these evaluations are: delineation of the questions to be asked, obtaining information to answer the questions, and feeding back obtained information (61, p. 123). As was suggested earlier, all of these evaluations were for the purpose of making decisions that could involve various degrees of change.

In 1971, Stufflebeam's revised his model to include accountability, as well as decision making, as a purpose of evaluation. He stated that he was influenced by Scriven's

concepts of formative and summative evaluation, formative evaluation being proactive, oriented toward development and decision making; and summative being retroactive and outcome or judgement oriented (61, p. 122). In doing so, Stufflebeam's definitions of evaluation roles came to include the following definitions, though steps involved in executing the evaluation remained the same.

1. Context role - evaluation of the requirements or goals of the environment.
2. Input role - evaluation of resources used in program.
3. Process role - evaluation of procedures and methods.
4. Product role - evaluation of "ends" or goals.

Stufflebeam provided the matrix shown in Table 1 to illustrate his revised model (61, p. 123).

This revised model can be adapted for use in evaluating state mandated educational rehabilitation programs, as discussed below.

Table 1. Stufflebeam's revised evaluation model (61, p. 105)

Steps in Evaluation	TYPES OF EVALUATION							
	Context Role		Input Role		Process Role		Product Role	
	Decision making	Accountability	Decision making	Accountability	Decision making	Accountability	Decision making	Accountability
Delineating	(What questions will be addressed?)							
Obtaining	(How will the needed information be obtained?)							
Providing	(How will the obtained information be reported?)							

An Evaluation Model for State Mandated Educational Rehabilitation Programs

With some adaptations, the revised Stufflebeam model can be used to provide an evaluation model for a community college educational rehabilitation program such as the Drinking Drivers' Course. It is designed to be project rather than organizationally or individually oriented. It provides for the kind of outcome or product evaluation that is essential to a state mandated program. It also provides evaluation information on processes and inputs that are needed by the educational sector. In addition, it is designed to be flexible enough to accommodate administrators with minimum or maximum amounts of decision making to be made.

However, there are two ways in which the Stufflebeam model is inadequate for an evaluation of an educational rehabilitation program: first, his model is for programs where institutional administrators make the most of the decisions. When Stufflebeam discusses types of decisions in terms of degree of change and completeness of information, he describes a situation where administrators have a relatively large amount of information, but make relatively few decisions, calling it homeostatic decision making (78, p. 132). He points out that evaluations in this area are

not very complicated and that little consideration of them is needed (78, p. 132). Unfortunately, this is the kind of situation that an administrator of a state mandated program must confront. Information is available and an evaluation must be made, even though few decisions are made at the institutional level.

Stufflebeam's revised model is inadequate for a second reason, which relates to his assumption about the kind of educational system to which the model is to apply. This inadequacy also relates to the grounds on which he dismisses the "homeostatic" situation. Stufflebeam was apparently writing for elementary and secondary school administrators of more or less traditional educational programs. While these programs were influenced by systems outside the educational system, especially the federal government, they were not part of those systems. A visual representation of the kind of educational system in which he was apparently working is illustrated in Figure 2.

The school system and program are open systems in the sense that they both influence and are influenced by the environment in which they exist; yet, they are independent of that environment in many ways. Most decisions about individual programs are made in the educational institutions in which they exist. Most of the goals, implementation procedures and operations are carried out in

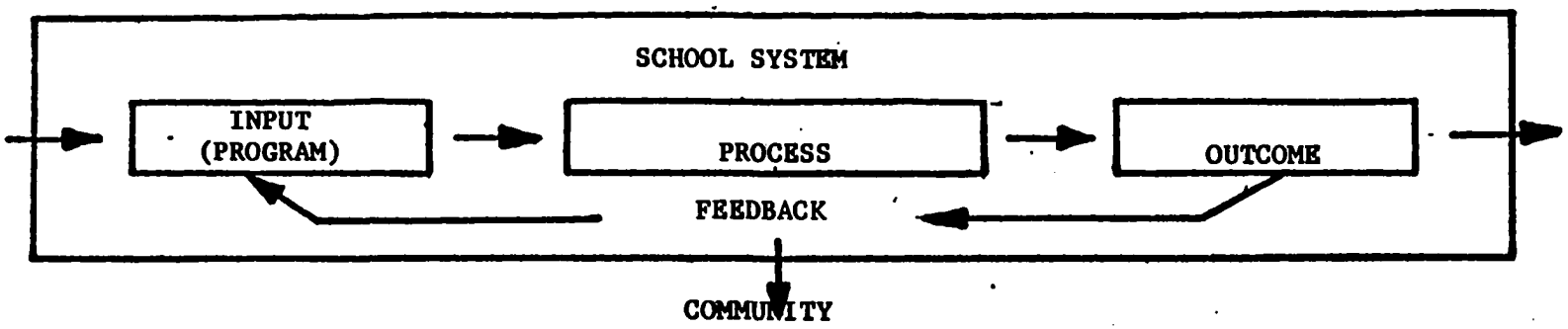

Figure 2. Educational system model

the school system.

Educational rehabilitation programs, on the other hand, like the Drinking Drivers' Course, are much less dependent on the educational institution and much more dependent on outside forces. Goals and objectives, student population and implementation procedures, curriculum, and schedules, and, perhaps even teacher qualifications are decided outside of the educational institution by public bodies which may not even have education as a primary purpose. Because of this, the system in which the program exists is very much different from the system in which Stufflebeam and his associates were working. The system described above might be illustrated in Figure 3.

An evaluation model can be provided for this system and for a state mandated educational rehabilitation program by modifying Stufflebeam's revised model. The modification is shown in Table 2.

Changes have been made to allow for the minimal amount of decision making within the educational institution and the maximum amount by bodies outside of it. The context role thus becomes an explanation of the goals provided by state law and the procedures implementing the goals as provided in the rules, regulations and guidelines of the stage agencies. In the case of the Drinking Drivers' Course, the state agencies include the Department of Public

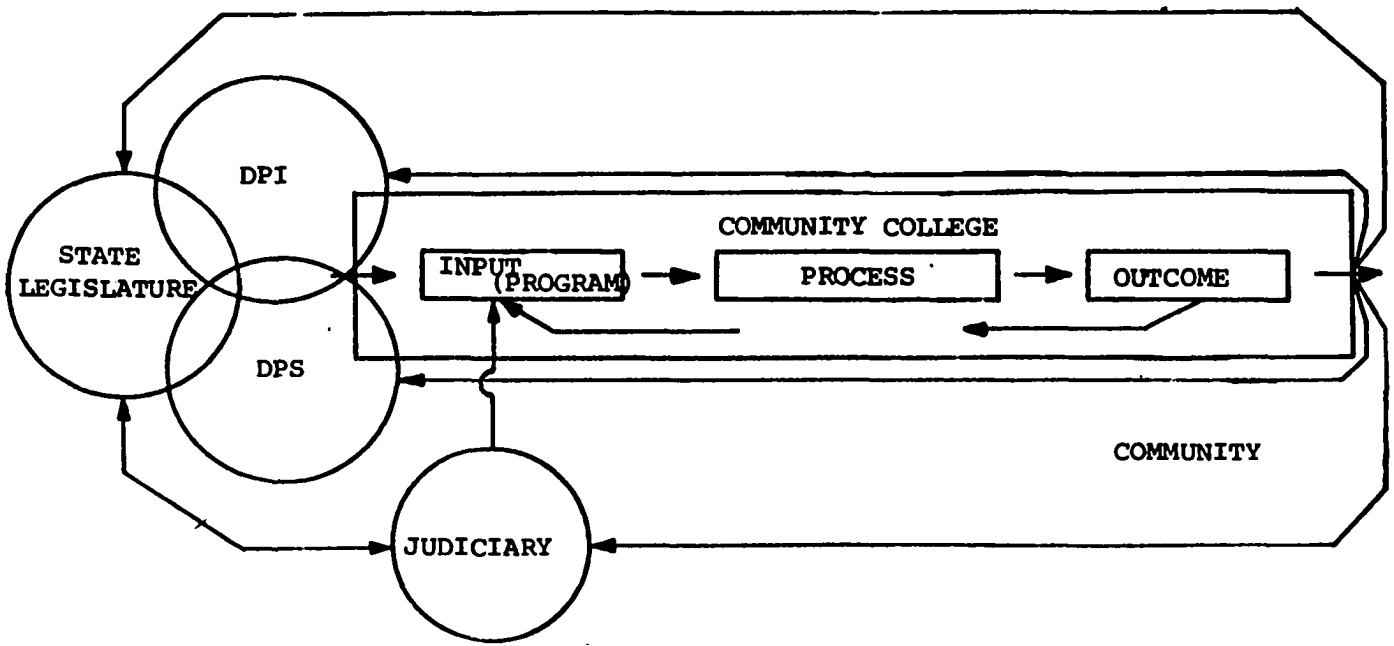

Figure 3. Community college educational rehabilitation system model

Table 2. Modification of Stufflebeam's revised model

Context & Background			INPUT		
			State		Local
State Law	State Rules & Regulations		Compliance	Feedback	Variation
		STEPS IN EVALUATION: Delineating	(To what areas will questions		
		Obtaining	(How will the needed information		
		Providing	(To whom will the obtained		

PROCESS			PRODUCT		
State		Local	State		Local
Compliance	Feedback	Variation	Compliance	Feedback	Variation

be addressed)

be obtained)

information be reported)

Instruction (DPI), Department of Public Safety (DPS), and the Supreme Court. The latter is included because it provides rules and procedures for courts handling drinking-driver cases. An evaluation is not made of the problem or needs of the environment or context, as Stufflebeam suggested, since for the most part, this is the task of the state legislature and to a lesser extent, state agencies.

The decision-making part of Stufflebeam's decision-making accountability dichotomy has been minimized to reflect the small amount of decision-making that takes place on a local, institutional level. A triad replaces this dichotomy, which expands the accountability evaluation to include a compliance and feedback evaluation of the state agencies' rules and guidelines and a descriptive evaluation of local variations of the state rules and guidelines. Since the members of the courts are included in the state mandate and should be knowledgeable about the program, they are also included in the compliance and feedback evaluation. Arrows indicate that an evaluation should logically proceed from an evaluation of input to an evaluation of process to an evaluation of products, though in fact, all of these evaluations may be going on at once. The delineation, obtaining and providing steps of evaluation are the same as in the Stufflebeam model.

It should be noted that users of the model are intended to be community college administrators. However, evaluators from state agencies would also find the model appropriate, though some parts of it, such as local variations may not be of interest. Also the model is intended to be used as a whole. Thus, if the program is to be evaluated, all of the model should be used. However, parts of the model could be used on an on-going basis and other parts used occasionally when a full evaluation of the program is required. How often these "occasional" sections are implemented would depend upon the demands of the state policy-making bodies and the needs of the local institution.

CHAPTER III. METHODS AND PROCEDURES

A theoretical model for evaluating state mandated educational rehabilitation programs was developed in the preceding chapter. In this chapter the methods and procedures used to operationalize the model and test it are discussed. Included in the discussion are descriptions of an operational model and steps for implementing it, the population on which the model is to be tested, and the research procedures used in testing the model. As was stated earlier, the state mandated educational rehabilitation program on which the model is to be tested is a course taught in Iowa's community colleges, the Drinking Drivers Course (DDC).

Operational Model and Steps for Implementation

An operational model for use in testing the theoretical model was developed by substituting specific information regarding the DDC for the abstract statements of the theoretical model devised in the preceding chapter. The operational model is shown in Table 3. The specific information substituted included data about the areas of state laws, rules and guidelines relating to the DDC, and of inputs, processes and products of the DDC. Information in each of these areas was categorized as evaluating compliance

Table 3. Operating model for evaluating the Iowa Drinking Drivers' Course (DDC)

CONTEXT AND BACKGROUND		STEPS	AREAS OF EVALUATION		
State Law Description	State Rules & Guidelines Description		INPUT CATEGORIES Compliance	Feedback	Local Variations
Code of Iowa, 1975 Section 321	DPI	DELINEATING	Curriculum Outline	Curriculum Outline	Curriculum Outline
	DPS		Schedule	Schedule	Schedule
	Supreme Court		Population	Population	Population
		OBTAINING	Questionnaires to: Teachers, Coordinators, Judges	Questionnaires to: Teachers, Coordinators, Judges	Questionnaires to: Teachers, Coordinators, Judges
		PROVIDING	DPI, DPS, Supreme Court, Teachers, Coordinators	DPI, DPS, Supreme Court, Teachers, Coordinators	DPI

AREAS OF EVALUATION					
PROCESS CATEGORIES			PRODUCT CATEGORIES		
Compliance	Feedback	Local Variations	Compliance	Feedback	Local Variations
Methods	Methods	Local Methods	Recidivism Attitudes Referrals	Goals & Effectiveness	Side Effects
Questionnaires to: Teachers, Coordinators	Questionnaires to: Teachers, Coordinators Completed Students	Questionnaires to: Teachers, Coordinators	TRACIS Analysis Attitude Questionnaire to participants Questionnaire to Teachers, Coordinators, Judges	Questionnaires to: Teachers, Coordinators, Judges, Completed Students	Questionnaires to: Teachers, Coordinators
DPI Teachers, Coordinators	DPI, Teachers, Coordinators	DPI, Teachers, Coordinators	DPI, DPS, Supreme Court, Teachers, Coordinators, General Assembly	DPI, DPS, Supreme Court, Teachers, Coordinators, General Assembly	DPI, DPS

with state laws, roles and guidelines, feedback about those state provisions, or local variations from them.

Implementation of the operational model was brought about through the three steps provided in the model: delineating that which is to be evaluated, obtaining evaluative information, and providing that information to the appropriate groups.

Because the step for obtaining evaluative information is the most complex of the three, it is described in more detail in Table 4. The sources from which information is to be obtained and the specific information needed are described as well as the area and category to which sources and information belong. The information to be obtained for the evaluation is placed in Table 4 in order of priority. The first priority is gathering background information, because it is on this information that the rest of the study is based. The second priority is requesting recidivism information from the state traffic records computer files. Experience demonstrates that gathering recidivism information is a lengthy process due to the wait time associated with having requests approved, transferred, and carried out.

Gathering attitude information from students participating in the class is the third priority. This is because information on pre- and post-class attitudes cannot be

Table 4. Sources, areas, categories, and description of information needed for obtaining information for evaluating the DDC

Source of Evaluative Information	Information Needed for the Evaluation	Area and Category of Information
Stage agencies	1. Background information	1. State law on the DDS
		2. State rules and guidelines for the DDS sentencing procedures and curriculum.
TRACIS (State Traffic Records Computer File)	1. Product data on recidivism (compliance)	1. Data on subsequent OMVUI and reckless driving arrests of persons taking/not taking the DDC, and arrested for OMVUI. Comparisons are to be made between the two groups.
Students, at the time that they are participating in the class.	1. Product data about attitude changes (compliance).	1. Experimental pretest-posttest questionnaire given in the class attitude changes toward drinking and driving.
Judges	1. Input data on the population sentenced to the class (feedback).	1. Percent of persons with first OMVUI conviction referred to the class. Reasons for no referral.
	2. Product data on class effectiveness and referrals (feedback).	2. Procedures for identification and referral of problem drinkers, effectiveness of the course, evidence on which effectiveness response is based.

Table 4 (Continued)

Source of Evaluative Information	Information Needed for the Evaluation	Area and Category of Information
Students, after having completed the course.	1. Input data about class schedules (feedback).	1. Attitude of students toward schedule
	2. Process data about methods used in the class (feedback).	2. Attitude of students toward methods.
	3. Product data about class effectiveness (feedback).	3. Effectiveness of the class, changes in behavior, and suggestions for improvement.
Teachers and coordinators.	1. Input data on curriculum outline, schedule and population, (compliance, feedback and local variations).	1. Compliance with recommended schedule and outline, local variations, numbers of problem drinkers in the class.
	2. Process data on methods, (compliance, feedback and local variations).	2. Compliance with recommended classroom methods, local variations, suggestions for improvement.
	3. Product data on outcomes (feedback).	3. Attitude toward class effectiveness, suggestions for in-service training for improving teacher effectiveness.
Teachers	1. Product data on outcomes (compliance, feedback).	1. Procedures and frequency of identification and referral of problem drinkers.

completely gathered until a class has been completed, which is several weeks in areas where classes are not held regularly. The fourth and fifth priorities are gathering information from judges and students who have completed the course. This is because the names and addresses of judges and completed students are more difficult to obtain than those of teachers and coordinators which is the sixth priority.

A simplified version of Table 4, showing the areas and categories of information to be obtained from specific sources is provided in Table 5.

Population

The model was tested on persons from Iowa who have been associated with the DDC since 1972-1975. Included in this group are traffic court judges, community college administrators and teachers of the DDC, students who are participating in the class, and students who have completed the class. Populations on which specific research procedures were used are discussed more completely in the section on research procedures.

Table 5. Sources, area and categories for obtaining information for evaluating the DDC

State Agencies	Area	Category	SOURCE					
			TRACIS	Participating Students	Judges	Completed Students	Teachers	Coordinators
Background Information	INPUT	Compliance					X	X
		Feedback			X	X	X	X
		Local Variation					X	X
	PROCESS	Compliance					X	X
		Feedback				X	X	X
		Local Variation					X	X
	PRODUCT	Compliance	X	X			X	
		Feedback			X	X	X	X
		Local Variation						

Research Procedures

A discussion of the research procedures used in the study and of the pertinent research literature about them is provided below. The procedures are discussed by source as provided in Table 3.

Stage agencies

No formal research procedures were used to obtain information on state law and departmental regulations and guidelines. Copies of laws, regulations, and guidelines were requested from members of the DPI Adult Education and Community College Divisions; from members of the DPS Traffic Safety Division; from the Supreme Court's Traffic Court Division staff; and from state legislators. Interviews regarding the background and intent of the program were held with members of the above groups.

Recidivism study (TRACIS)

In order to provide information about the effectiveness of the DDC program, a comparison of recidivism rates of class and no-class Operating a Motor Vehicle Under the Influence (OMVUI) offenders was carried out.

A review of the literature shows that this kind of analysis has been carried out in other states with varying results. A 1971 study in Phoenix, Arizona, shows that the

recidivism rates of class and no-class groups was 7.94% and 10.43% respectively, on a three-year basis (12, p. 15). On a one-year basis the class and no-class rates were 4.99% and 7.38%. Covariant analysis showed a small but statistically significant difference in favor of the class group (12, p. 15). Similarly, positive results were obtained in a study of class, no-class recidivism rates in Erie, Onandaga, and Westchester counties in New York (47, p. 59). The format of New York and Phoenix DDC classes was similar to that of Iowa classes.

The Phoenix and New York studies however, did not meet the standards recommended by the USDOT. Both studies segregated problem and social drinkers, but did not randomly assign offenders to class, no-class groups as the USDOT recommends. Of the seven DDC recidivism studies which did meet USDOT standards, only one had positive results. Four other had inconclusive results and two were unfavorable (69, p. 11, 13). None of these studies were of classes with formats similar to Iowa's. It should be noted that the USDOT cautions against relying on any recidivism study as an indication of the success or failure of the DDC, because it has estimated that the probability of any drinking driver being arrested to be between 1/1000 and 1/2000 (48, p. 14).

As suggested earlier, the Iowa study was limited because no separation of problem and social drinkers and random assignment of OMVUI offenders to control and treatment groups was made. At the time of this study identification of problem and social drinkers was impossible because no uniform identification of them was made either by the Iowa courts or DDC instructors. In some states problem drinkers are defined to be OMVUI offenders with one or more prior arrests and a Blood Alcohol Content (BAC) level of .15 or greater at time of arrest (51, p. 62). However, in Iowa even this kind of identification is impossible, because the BAC readings are not available on statewide traffic record files. Random assignment of OMVUI offenders to control and treatment groups was not carried out because it would have meant denial of treatment to certain offenders, which is not acceptable in Iowa.

Keeping in mind the recommendations of the USDOT and the limitations on an Iowa DDC study, a quasi-experimental static-group comparison design was used with no random assignment of population, and a posttest only following the treatment. This design was used to test the hypothesis that DDC class completion makes no difference in the recidivism rate of OMVUI offenders. The population on which the comparison was made was all Iowa citizens convicted of OMVUI inside or outside the state between July 1, 1973 and

June 30, 1974 and all Iowa citizens who attended the DDC class between the same dates. The control group was those persons convicted of OMVUI but not attending the DDC class, treatment for this group being a conviction for OMVUI between July 1, 1973 and June 30, 1974. Persons convicted of OMVUI and completing the DDC class were the experimental group. The treatment for this group was conviction for OMVUI and completion of the DDC class between July 1, 1973 and June 30, 1974.

In order to provide some indication of the incidence or problem and social drinkers in the population, all offenders were identified as to whether or not they had OMVUI convictions prior to treatment, prior conviction suggesting the presence of a problem drinker, and no prior conviction suggesting the presence of a social drinker. No-class offenders were identified as prior offenders if they have been convicted of OMVUI before July 1, 1973. Class offenders were identified as prior offenders if they had than two or more convictions before attending the class.

The effects of the treatments on class and no-class, and prior and no-prior groups were compared by determining recidivism rates for each group for the quarter of treatment and for the eight quarters after the treatment. Recidivism for class offenders was defined to be any OMVUI conviction occurring after taking the class, including convictions

that required attendance in additional DDC classes. Recidivism for no-class offenders was defined to be any OMVUI conviction following the treatment. Frequencies of recidivism per quarter were determined for all groups, and totals and percentages were calculated. The difference between treatments was analyzed by means of a z test, using the normal approximation to the binomial distribution. The z test was made to test the hypothesis that the proportion of persons with subsequent OMVUI arrests do not differ between compared groups. The formula used was

$$z = \frac{\hat{p}_1 - \hat{p}_2}{\sqrt{\hat{p}(1-\hat{p})\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$

n_1 = number of persons in group 1

n_2 = number of persons in group 2

$\hat{p}_1$ = recidivism proportion for group 1

$\hat{p}_2$ = recidivism proportion for group 2

$\hat{p}$ = pooled recidivism proportion for both groups.

A one-tailed test was used for both class, no-class and prior, no-prior comparisons. This is because it was assumed that the recidivism rates would not increase by completing the class, or by having no-prior OMVUI convictions, but would only stay the same or decrease.

Recidivism rates which included reckless driving convictions as well as OMVUI convictions subsequent to treatment were also calculated. Reckless driving convictions were included because in some cases judges reduce OMVUI charges to reckless driving charges for second OMVUI offenders, thus disguising a subsequent OMVUI offense.

Data was obtained from the Iowa TRACIS system files described on page 13. In a few instances, there were problems with this data concerning information about OMVUI convictions and DDC class attendance. One problem was that in some cases, part of the code combination representing OMVUI convictions was left out or recorded as something other than intended. Most of these errors were found in the data retrieved between 1973 and early 1974 when the TRACIS system was beginning its operations. Because the expected code combination was not present, some persons convicted of OMVUI were not picked up in the data retrieval. While this number of offenders not counted because of these coding errors does not appear to be large, it may have made a small difference in the recidivism frequencies.

A second problem was that in some cases offenders

attended class immediately after the arrest, but before being convicted. When retrieved from the data file, it appeared that the conviction was recidivism because it followed the class, when in fact, it was not. In most cases the correct decision could be deduced from the data, though in others it was necessary to turn to the original records for clarification.

Student participants' attitude study

In order to determine some changes in drinking and driving attitudes and behavior brought about by the course, a questionnaire was administered to students participating in a DDC at each area school (see Appendix C for the instrument).

Part of the questionnaire was the Simon Attitude Questionnaire, which has been used throughout the country, especially in ASAP programs, to evaluate attitude changes in DDC. A review of the U.S. DOT literature indicates that 100% of the 1973 ASAP programs using this instrument yielded positive attitude changes (69, p. 12). However, in 1972 only 9 out of 13 or 69% yielded positive results (69, p. 11). The U.S. DOT noted that results were most meaningful when the scores for social and problem drinkers were analyzed separately (69, p. 11).

While recognizing that in Iowa the social and problem drinkers have not been identified or segregated, and that attitude change is only an intermediate measure that may or may not be related to behavior change, the Simon questionnaire was administered to participants of the Iowa DDC.

The Simon questionnaire is a 38-item attitude scale of the true-false type. It requires 10 minutes to administer and is designed to measure attitude toward driving after drinking. The instrument uses equal-appearing interval scaling techniques from a revised pool of 70 items. Items were originally rated on a 9-point scale by a panel of 133 experts including hospital alcoholism staff workers, alcoholism counselors, and graduate students in research (12, p. A-13). The mean s (scale) value is 5.04, with a range from 1.77 to 8.93. The mean Q (interquartile range) value is 1.50, with a range from 0.57 to 2.38. Estimates of reliability ranged from .79 to .84 using a split-half technique after rank ordering items according to item weight and correcting for shortened test length with the Spearman-Brown prophecy formula. Content validity is judged to be high and construct validity was suggested empirically with a criterion groups approach. Analysis was made by use of a $\bar{z}$ test, obtained by using the SPSS

system at the Iowa State University Computational Center.

Attached to the Simon questionnaire were questions requesting information on changes in drinking and driving behavior. Most of these questions were developed by this researcher in an effort to analyze the effects of the class on changes in behavior. Questions were asked concerning alternatives used instead of drinking and driving, number of times alternatives were used, and the amount of alcohol consumed before refusing to drive. The latter question was previously asked in a Sioux City Behavior Modification School (BMS) and 20.2% of persons in the household survey gave correct responses (36, p. 1). One question was asked concerning knowledge about the amount of alcohol that can be drunk before becoming legally intoxicated. This question does not indicate a change in behavior, but was considered important to ask, since an awareness of the answer is a necessary precursor to changed drinking and driving behavior. It is taught in all of the classes. The question has also previously been used in a study of BMS and in a household survey in Sioux City where the average number of drinks for members of the BMS was 4.4, and for the household survey, it was 4.1 (36, p. 10). Analysis of the results of this part of the questionnaire were descriptive. Frequencies and mean scores

were calculated.

The questionnaire was first administered to classes at Des Moines Area Community College (DMACC), since this area has a larger population of students taking the course at one time than most other areas. After appropriate revisions, the entire questionnaire was intended to be given to one class at all the area schools around the state, except at Sioux City, where the population characteristics of the classes differ from the rest of the state. In Des Moines, the test was given three times, as a pretest, a posttest, and as a six weeks follow-up posttest. However, because of a low return rate, and complaints of harassment from participants, the third 6 weeks follow-up mailing was eliminated. Because response to the second set of questions was not complete, and because these responses needed to be compared to responses from the eliminated 6 weeks follow-up, this set of questions was not administered to the other area schools.

Judges' questionnaire

It was determined that a survey questionnaire would be written and sent to judges who try OMVUI cases in order to gather information about referrals to the class, (input) about identification and treatment referrals of problem drinkers, (output) and about the judges' attitudes toward

class outcomes (for questionnaire, see Appendix B).

Using guidelines provided by the National Center for Higher Education Management Systems (29; 43, pp. 291-320) a cross-sectional self-report survey questionnaire was developed. At this time, it does not appear that a similar questionnaire has been used in other states. Before developing the questionnaire, information was gathered from DPI, DPS, and the Supreme Court Traffic Court Administrator. Two Polk County traffic court judges reviewed a draft questionnaire which was then revised and sent to 121 judges who are authorized to try OMVUI cases in Iowa. Three mailings were sent with a subsequent follow-up on an appropriate number of judges who did not respond to determine if they differed in any way from those who did. Frequencies, mean scores, and cross tabulations were provided.

Student class completers' questionnaire

In an effort to provide feedback about classroom processes and methods and about class outcomes, survey questionnaires were sent to a sample of students who had completed the course (see Appendix E for a sample questionnaire).

In developing the questionnaire, information on student evaluation surveys provided by the National Center for

Higher Education Management Systems (NCHEMS), (8, 43) was used, as well as specific information provided by DPI personnel and course instructors. The cross-sectional self-report questionnaire developed for the survey was tested on available DMACC students and teachers. A random, systematic sample of 500 class completers was selected on an statewide basis from all class completers taking the course from January 1, 1975 to December 31, 1975. Three mailings were sent. Frequencies and mean scores were calculated.

In developing specific questions, an effort was made to ask only questions that would apply on a statewide basis so that responses from different schools could be compared.

Teachers' questionnaire

Since teachers have access to a large amount of information about the class, it was decided to ask them for responses about inputs, process and products. With the exception of the questions about referrals of problem drinkers, all questions discussed below were also asked of coordinators (see Appendix F for a sample questionnaire).

A cross-sectional self-report questionnaire was developed using guidelines provided by NCHEMS (29, 43). Information regarding the questionnaires were gathered

from the Adult Education and Community College Divisions of DPI, and from discussions with the coordinator and teachers at the Des Moines Area Community College. Questionnaires were sent to the 25 teachers presently teaching the DDC at all area schools locations in Iowa. Three mailings were sent. Frequencies and mean scores were calculated.

Coordinators' questionnaire

Since in many area schools, adult education coordinators also have access to a great deal of information about the DDC, a questionnaire was also sent to them requesting data about input, processes and products.

For the most part, the questionnaire was developed in the same way as that sent to the teachers. The questionnaire was sent to 17 coordinators presently supervising DDC in all of the area schools locations in Iowa. Three mailings were sent. Frequencies and means were calculated.

Coordinators were asked the same questions as were asked the teachers with one exception. They were not asked the question about referrals, since it is felt that most coordinators do not have ready access to this information.

CHAPTER IV. TESTING THE MODEL: FINDINGS FROM THE IOWA DRINKING DRIVERS' COURSE STUDY

In order to test the model, an evaluation of the Iowa Drinking Drivers' Course program was carried out. The results of this test are provided below as well as generalizations regarding these results. It should be noted that the results are categorized by source, and with the exception of state agencies, subcategorized by area (input, process or product) and type (compliance, feedback, and local variation), see Table 5. Results were categorized by source in order that individual questionnaires could be discussed as a whole. When generalizations were made, they were organized by area and by type.

Results

State agencies

Background and context information from state agencies is provided below. Information is first provided on the Iowa DDC program, and then on the ASAP DDC program that is operating in Iowa.

The Iowa Drinking Drivers' Course

In 1972 the Iowa General Assembly, confronted by an increasing rate of alcohol related traffic accidents and Operating a Motor Vehicle Under the Influence (OMVUI) arrests, passed legislation establishing a course for drinking drivers in the area community colleges and vocational schools.

According to Representative Joan Lipsky, the main sponsor of the legislation, it was planned that the law would provide judges with an alternative or an addition to using a fine, imprisonment, or referral to an alcoholism program as a sentence for OMVUI. According to Representative Lipsky, it was also intended that the class would provide an opportunity for self-analysis by the students of their motives for drinking and driving, and an opportunity for the diagnosis and referral of problem drinkers in the course. The intention as stated in the law, was to provide:

> . . . a course designed to inform the offender about drinking and driving and encourage the offender to assess his own drinking and driving behavior in order to select practical alternatives. (Code of Iowa, 1975, Sec. 321.283, Subs 1a. See Appendix A for the entire statute.)

The legislation was implemented by the DPI and DPS. The DPI was responsible for ensuring that the course

was provided on a regular basis at the area and vocational-technical schools, and for developing a curriculum to be approved by the DPS. An advisory committee with members representing DPI, DPS, the area schools, the General Assembly, the American Automobile Association, and the local alcoholism units was appointed to assist the DPI in developing the curriculum. The advisory committee used as a model a course of instruction developed by Arizona State University and Columbia University for the city of Phoenix.

The committee decided upon a course curriculum, the purpose of which was to provide participants with information about the consequences of drinking and driving. It was also to change attitudes about drinking and driving so that there would be a reduction in OMVUI arrests and OMVUI related accidents of class completers. The course was to include the following objectives:

1. Presenting factual information about the physical effects of alcohol;
2. Encouraging and assisting students with a self-assessment and an awareness of their drinking and driving problems;
3. Motivating students to a safer behavior involving drinking and driving;
4. Assisting students in establishing contact with service agencies within their own communities.

The committee determined that the course was to be taught in the 15 area schools. Each class was to meet

three hours one day a week for four consecutive weeks with a maximum enrollment of twenty participants and a minimum of eight. To receive credit for taking the course, participants were required to attend all four classes in consecutive order, complete all assignments, participate in class discussions, and have an average grade of C on all quizzes. A fee of $20 per participant was assessed to defray costs. Participants were also counted in determining Full Time Enrollment Equivalent (FTEE) for state aid.

At each area school a coordinator, usually a member of the adult education staff, was assigned to administer the course, and to ensure compliance and cooperation with the courts and with the Department of Public Safety. The coordinator was made responsible for hiring the instructors. Initially all instructors were trained in a special program developed by the University of Iowa and funded by the American Automobile Association.

The DPS helped to implement the Drinking Drivers' Course, by approving the curriculum,by providing the courts with information on the schools, and by adopting departmental rules setting forth the way in which course completion by students relates to OMVUI sentencing procedures. These rules, in combination with existing law, allow the courts to hand down sentences for persons with a first OMVUI conviction that include the following:

1. Deferred sentence with probation: The defendant may or may not be required to take the drinking drivers class. There is no fine or license revocation.

2. Indefinitely revoked license: The defendents are fined $300, their licenses are revoked for 30 days, and they must complete the drinking drivers course before regaining their licenses. A permit to drive to the class and to work is provided during the 30 day revocation period.

3. License revoked for 120 days. The defendant is fined $300, and the license is revoked for 120 days. The defendant may or may not be required to attend a drinking drivers class.

Because a second conviction for OMVUI is classified as a felony, and the punishment is accordingly severe, prosecutors sometimes plea bargain and reduce a second conviction to a reckless driving charge or to a second "first conviction". Required enrollment in the drinking drivers course is not used in relation to a reckless driving charge, but it may or may not be used with a second "first" conviction for OMVUI.

Records of class completions are kept by the Department of Transportation (DOT) and DPI. OMVUI convictions, class completions and subsequent convictions, though not deferrals are kept by TRACIS, which is now a function of the DPS, but in the process of being transferred to the DOT.

The law providing for the DDC became effective on July 1, 1972, with classes to begin operation on or before

March 1, 1973. The first course opened for enrollment in Sioux City in November 1972, though classes in most other areas did not open until 1973. By July 1, 1976, 8,449 people had completed the class. Students completing the class per year (including out of state residents and persons with no licenses) was as follows:

Table 6. Number of students completing the DDC course, July 1975-July 1976[a]

Year	Number
1972-73	865
1974	2,428
1975	3,123
1976 (1st and 2nd Qtr.)	2,033

[a]Figures provided by Adult Education Division, Department of Public Instruction.

Alcohol Safety Action Project grants The federal Alcohol Safety Action Projects (ASAP) have been instrumental in developing drinking drivers schools and the evaluation measures for them, throughout the nation. Because of this, and because one of the ASAP demonstration sites in Iowa, it seems necessary to describe what the

ASAP's are, and how they were developed. A discussion of some of the research carried out by the ASAP's is provided in later chapters.

The ASAP programs began in 1970, when the U.S. DOT began to grant funds for 35 demonstration alcohol countermeasures projects. The impetus for the funding began in 1966 when a report was submitted to Congress by the Secretary of Transportation identifying alcohol as the largest single factor contributing to fatal crashes in the U.S. The report indicated that 50% of all highway fatalities were alcohol related (69, p. 1).

The goal of the ASAP demonstration projects was to reduce alcohol related fatal, injury, and property damage crashes by reducing the number of persons driving while intoxicated. In order to do this each demonstration project was to provide for the coordination of existing alcoholism and traffic safety agencies, for pre-sentence investigation to identify problem drinkers, and for the use of short-term rehabilitation alternatives like education and therapy, as well as traditional penalties. Built into the design of each demonstration project were procedures for evaluation, usually for attitude change and recidivism studies, some of which are discussed later in this study.

In October 1972, Sioux City-Woodbury County, Iowa was chosen by one of the sites for an ASAP demonstration project

to be funded for three years. As part of the project a pre-sentence investigation for persons convicted of drinking and driving was established to identify problem drinkers, and a required behavior modification class was developed for these persons. A required drinking drivers educational class meeting state guidelines as described above, was established for nonproblem or unidentified drinkers, and was taught at the area schools. In an effort to evaluate the project, analysis was done on recidivism of problem, social and unidentified drinkers (65, p. 10) as well as on pretest-posttest scores of class participants from knowledge and attitude tests (35, p. 12). In a further effort at evaluation, a longtitudinal study was made of Behavior Modification Class graduates to determine changes in life styles resulting from the class. Data from this study was compared to baseline data obtained from household and roadside surveys carried out in the Sioux City-Woodbury County Area (35, p. 2).

It is necessary to point out that the Sioux City-Woodbury County drinking drivers program is unique to Iowa in that problem drinkers are not allowed to attend the Drinking Drivers Course, though they are required to do so in the rest of the state. Because of this, the Sioux City area Drinking Drivers' Course has not been included in

the evaluation that this study undertakes, since the population to be evaluated would be different than the rest of the state and would provide different kinds of results. However, some of the research data from the Sioux City ASAP evaluation is discussed in this study, and it is suggested that persons interested in an alternative to the DDC program used in the rest of the state, may wish to study the Sioux City program.

The funding for the ASAP demonstration sites continued after 1975, but the number of sites was reduced to 8. Sioux City was not included among these sites. Smaller ASAP grants were funded in 1976 in Iowa in Linn County, Polk County, Council Bluffs, and Dubuque, but these were for improved law enforcement and judicial diagnosis and did not include education or rehabilitation.

Recidivism study

As was stated earlier, recidivism data was collected for Iowa citizens convicted of OMVUI inside and outside the state between July 1, 1973 and June 31, 1974. The total population numbered 3545 of which 1871 had attended the class and 1674 had not.

Product-compliance Recidivism information about class, no-class and prior, no-prior groups for the quarter of arrest and the eight following quarters not including

reckless driving convictions are provided in Table 7.

It can be noted that while there was a marked difference between the recidivism rates of prior and no-prior groups, there was little or no difference between the rates of class and no-class groups.

Recidivism information for OMVUI and reckless driving convictions subsequent to OMVUI treatment for 8 quarters is provided in Table 8.

Again, it can be noted that there was a marked difference between the recidivism rates of prior and no-prior groups, but that there was little or no difference between the rates of class and no-class groups.

Recidivism rates were different for the first four quarters for all groups than for the entire eight quarters. Because of this, recidivism information for the first four quarters following treatment for all groups including and not including reckless driving convictions is provided in Tables 9 and 10.

It can be noted that there is again a marked difference between the recidivism rates of prior and no-prior groups. There is also a small difference between class and no-class groups, favoring the class group.

Results from z tests for the first eight and first four quarters are provided in Table 11 and 12. It can be noticed that significant differences between class and

Table 7. Recidivism rates for class and no-class OMVUI convictions in prior and no-prior conviction categories, by quarter not including reckless driving convictions

	Class			No-class			Total		
	Prior	No-prior	Total	Prior	No-prior	Total	Prior	No-prior	Total
Total	319	1552	1871	316	1358	1674	635	2910	3545
Non-Recidivism	273	1433	1706	259	1265	1524	532	2698	3230
Recidivism Quarter									
0	0	0	0	9	24	33	9	24	33
1	5	15	20	9	5	14	14	20	34
2	4	15	19	6	11	17	10	26	36
3	3	10	13	3	8	11	6	18	24
4	9	18	27	5	16	21	14	34	48
5	6	17	23	7	6	13	13	23	36
6	9	19	28	4	7	11	13	26	39
7	6	16	22	6	9	15	12	25	37
8	4	9	13	8	7	15	12	16	28
Total Recidivism	46	119	165	57	93	150	103	212	315
% Recidivism	14.4	7.7	8.8	18.0	6.8	9.0	16.2	7.3	8.9

Table 8. Recidivism rates for class and no-class OMVUI convictions in prior and no-prior conviction categories by quarter including reckless driving convictions

	Class			No-class			Total		
	Prior	No-prior	Total	Prior	No-prior	Total	Prior	No-prior	Total
Total	319	1552	1871	316	1358	1674	635	2910	3545
Non-Recidivism	267	1416	1683	257	1252	1509	524	2668	3192
Recidivism Quarter									
0	0	0	0	10	28	38	10	28	38
1	7	18	25	9	7	16	16	25	41
2	5	17	22	6	12	18	11	29	40
3	3	14	17	3	10	13	6	24	30
4	9	21	30	5	18	23	14	39	53
5	6	18	24	7	7	14	13	25	38
6	11	21	32	4	8	12	15	29	44
7	7	17	24	7	9	16	14	26	40
8	4	10	14	8	7	15	12	17	29
Total Recidivism	52	136	188	59	106	165	111	242	353
% Recidivism	16.3	8.8	10.0	18.7	7.8	9.9	17.5	8.3	10.0

Table 9. Recidivism rates for class and no-class OMVUI convictions in prior and no-prior conviction categories for 4 quarters not including reckless driving convictions

	Class			No-class			Total		
	Prior	No-prior	Total	Prior	No-prior	Total	Prior	No-prior	Total
Total	319	1552	1871	316	1358	1674	635	2910	3545
Non-Recidivism	273	1433	1706	259	1265	1524	532	2698	3230
Recidivism Quarter									
0	0	0	0	9	24	33	9	24	33
1	5	15	20	9	5	14	14	20	34
2	4	15	19	6	11	17	10	26	36
3	3	10	13	3	8	11	6	18	24
4	9	18	27	5	16	21	14	34	48
Total Recidivism	21	58	79	32	64	96	53	122	175
% Recidivism	6.2	(3.7)	4.2	10.1	4.1	5.7	8.3	4.2	4.9

Table 10. Recidivism rates for class and no-class OMVUI convictions in prior and no-prior conviction categories for 4 quarters not including reckless driving convictions

	Class			No-class			Total		
	Prior	No-prior	Total	Prior	No-prior	Total	Prior	No-prior	Total
Total	319	1552	1871	316	1358	1674	635	2910	3545
Non-Recidivism	267	1416	1683	257	1252	1509	524	2668	3192
Recidivism Quarter									
0	0	0	0	10	28	38	10	28	38
1	7	18	25	9	7	16	16	25	41
2	5	17	22	6	12	18	11	29	40
3	3	14	17	3	10	13	6	24	30
4	9	21	30	5	18	23	14	39	53
Total Recidivism	24	70	94	33	75	108	57	145	202
% Recidivism	7.5	4.5	5.0	10.4	5.5	6.5	9.0	5.0	5.7

Table 11. z-tests comparing recidivism rates of all groups for 8 and 4 quarters, not including reckless driving convictions

Grouping				z value	
				8 qtrs	4 qtrs
Class	vs	No-class	:	0.21	2.07*
Prior, Class	vs	Prior, No-class	:	1.23	1.78*
No-prior, Class	vs	No-prior, No-class	:	0.93	0.54
Prior	vs	No-prior	:	7.15**	4.34**

*Significant at .05.

**Significant at .01.

Table 12. z-tests comparing recidivism rates of all groups for 8 and 4 quarters, including reckless driving convictions

Grouping				z value	
				8 qtrs	4 qtrs
Class	vs	No-class	:	0.10	1.95*
Prior, Class	vs	Prior, No-class	:	0.80	1.28
No-prior, Class	vs	No-prior, No-class	:	0.98	1.23
Prior	vs	No-prior	:	7.00**	3.94**

*Significant at .05.

**Significant at .01.

no-class groups appear only in the data for the first four quarters.

In working with the data, it was noticed that not all of the class population attended the DDC immediately after conviction. Because it was felt that the length of time between conviction and completion of the DDC class may have some effect on the recidivism rate, it was decided that separate recidivism rates would be computed for persons who completed the class three or more quarters after conviction, and for persons who completed the class within less than two quarters. Rates were computed including and not including reckless driving convictions, though no persons completing the DDC class three or more quarters after conviction were charged with subsequent reckless driving convictions. Data comparing recidivism rates for all class and no-class groups is provided in Tables 13 and 14.

It can be seen from these tables that the recidivism rate of persons taking the class three or more quarters after conviction is much higher than the rates of other class completers. Eliminating these persons from the class group lowers the recidivism fate of the class group somewhat.

Additional information about the numbers of times offenders in the recidivism study population were arrested for OMVUI and attended a DDC class in their entire driving

Table 13. Comparison of recidivism rates of no-class, class taken up to three quarters after conviction, and class taken three or more quarters after conviction, not including reckless driving convictions

	No-class	Class up to 3 qtrs	Total	Class 3 qtrs and after
Total	1674	1838	3512	33
Recidivism	150	156	306	9
% Recidivism	9.0	8.5	8.7	27.3

Table 14. Comparison of recidivism rates of no-class, class taken up to three quarters after conviction, and class taken three or more quarters after conviction, including reckless driving convictions

	No-class	Class up to 3 qtrs	Total	Class 3 qtrs and after
Total	1674	1838	3512	33
Recidivism	165	179	344	9
% Recidivism	9.7	9.9	9.8	27.3

history from July 1, 1973 to June 30, 1976 is provided cross-tabulated in Table 15. While not directly related to the DDC study, it was thought that this information might be of interest to certain readers.

Table 15. Number of OMVUI convictions by number of times in DDC class per individual in recidivism study population

Number of times attended class	Number of Convictions								Total
	0	1	2	3	4	5	6	7	
0	0	1260	277	97	29	10	0	1	1674
1	0	1390	301	58	18	3	1	0	1771
2	0	33	46	17	2	0	0	0	98
3	0	0	0	1	0	0	0	0	1
4	0	0	0	0	1	0	0	0	1
Total		2683	624	173	50	13	1	1	3545

Judges questionnaire

Of the total population of 121, 104 judges responded of which 87 said they tried OMVUI cases. A follow-up on judges not responding indicated that most were district court judges who tried first offense OMVUI cases only occasionally.

Input, feedback Two questions were asked about the population that the judges sentence to the class. These questions are as follows:

One question was asked about referral of first offense OMVUI offenders to the DDC by judges in order to learn whether

judges do use the DDC course as a sentencing alternative. This information as well as that from the next section was also used to interpret data from the recidivism study discussed above. This question requested information about the percentage of offenders judges do not refer to the DDC. The average response was that 7% of persons with first OMVUI convictions are not referred, though 22% (n=17) of the responding judges said that they do not refer about 30%. In other words, it appears that while judges do use the course as a sentencing alternative, some use it much more than others.

A second question was asked judges about why they do not refer persons with OMVUI convictions to the schools. The responses to this question were given in Table 16.

This information was used in suggesting differences in the drinking-driving behavior of persons sentences and not sentenced to the DDC. These differences help to suggest the comparability of class and no-class groups in the recidivism study and also provide feedback about the sentencing procedure of judges.

It appears that reasons for not sentencing offenders to the DDC can be divided into two different categories: reasons which identify specific drinking-driving characteristics of the driver, and reasons which do not. Most of

Table 16. Number and percent of judges giving reasons why OMVUI offenders are not referred to the DDC course

Reasons	Number	Percentage
Specific		
Insurmountable barriers	7	10
Nonresident	19	26
Elderly	7	8
Had no license	2	3
Licence revoked for 120 days	10	14
Arrested for OMVUI before	15	21
Nonspecific		
Did not want to go	15	21
Did not request to go	13	18
Does not appear to drink much	8	11
		n=72[a]

[a]n means the number of judges responding to the question.

the persons who were not assigned to the DDC course for "specific" reasons probably do have different drinking-driving characteristics than the people who took the course, and probably have recidivism rates that are not comparable to rates of persons sentenced to the class. However, it should be pointed out that the nonresidents and people without licenses, are not on the TRACIS files, and therefore are not included in the recidivism comparison. Persons who have been arrested for OMVUI before have been identified. Those persons who have insurmountable barriers preventing

them from attending the class do not necessarily have different drinking and driving behavior from those who did not have these barriers and attended the class, but it does seem likely that the elderly and persons with licenses revoked for 120 days do. These people have been included in the recidivism study, and their presence weakens the comparability of class, no-class groups.

Persons not assigned to the class for nonspecific reasons do not seem to have specific characteristics, and appear to be in this group because of a personal decision of the judges, which may or may not be the same as the decisions of other judges. It seems likely that many of the people in this group have similar drinking and driving characteristics as people from other jurisdictions who were assigned to the course, and that their recidivism rates are comparable.

In summary, sentencing information from judges provides an indication that many of the persons not sentenced to the DDC and in the no-class comparison group have similar drinking-driving characteristics as people in the class group. This information supports the validity of comparing the groups. It should be pointed out, however, that before any final statement can be made about the validity of the comparison group, a much more thorough determination of the drinking-driving characteristics of persons in class and

no-class groups, should be carried out.

Product, feedback Three sets of questions provide feedback about the product or outcomes of the course. The first set refers to the judges' attitude toward the effectiveness of the course in reducing the number of class participants who drink and drive and to the information on which these attitudes are based. The second set refers to identification and treatment referrals of problem drinkers. Since these were intended to be outcomes of each class, it was of interest to ask judges in what way they participated in this process. A third set asked for suggestions for improvements in the course. Responses to these sets of questions are discussed below.

Set 1: Judges' attitudes toward the course Three questions were asked about judges' attitudes toward the course, and three about the feedback on which these attitudes are based.

The average response to the first question, which asked for a rating of class effectiveness on a five point scale, 1 being "very effective", was a 2.84 (n=62) an answer closest to the "somewhat effective" category. The response to this question was compared to the response of the individual judges about number of years trying OMVUI cases, the average

number of years being 6.84. The number of years in OMVUI courts did not appear to be strongly related to effectiveness responses, though it did appear that there was a slight tendency for those who were newer to trying OMVUI cases to be more optimistic about the DDC program.

Average response to a second question about whether students viewed the class as being: 1) a soft penalty, 2) a reasonable penalty, or 3) a determinant but an unreasonable penalty, indicated that the average judge feels that most students view the class as being between a reasonable and a soft penalty (1.58: n=66). It should be noted that judges were cautious about answering these two questions. 28.7% did not answer the question on effectiveness and 24% did not answer the question on how students view the class. On the other hand only 4.6% did not answer the first question on feedback discussed below.

In order to determine the judges' attitudes toward the course, a third question was asked about eliminating the course with and without changing the penalties. 14.65% (n=11) of the judges stated that if they could choose, they would eliminate the course. Of these 14.65%, 6.25% (n=5) said that they would eliminate it and place it with other penalties. Four of these five judges suggested adding harsher penalties including mandatory license revocation. One judge suggested that second and third OMVUI offenses not

be considered felonies. 8.4% (n=6) of the judges favoring elimination of the course said that they would leave the penalties as they now are, even though the course was eliminated.

Three questions on feedback asked the judges to rate and discuss the completeness of the feedback they received about the course, and its reliability. They were also asked whether they had ever attended the course. Responses to a first question asking from what source feedback about the course was received are shown in Table 17.

Table 17. Number and percent of judges giving sources of feedback about the DDC course

Responses	Number	Percentage
Defendants	30	36
Attorney or other judges	25	30
Alcoholism and mental health counselors	12	14
Law enforcement personnel	12	14
College personnel	5	6
Hearsay	2	2
Familiars of defendants	1	1
No or very little feedback	33	38
		n=83

To the second question, most judges gave a low rating on completeness of the feedback, the average response was a 2.44 (n=50) on a 3 point scale, with a 3 being "not at all complete". The average response to the third question about reliability of feedback was higher, a 1.69 (n=49) on a 3 point scale, with 1 being "very reliable". In response to a question about course attendance, only 2 judges out of the 87 respondents said that they had attended the course. This somewhat negative response about feedback, probably indicates why most judges were somewhat cautious about answering questions on effectiveness.

Set 2: Identification and referral of problem drinkers

Judges were asked two questions about identification and referral of problem drinkers. In regard to the first question about identification of problem drinkers, 55% of the judges said that they are identified in their courts. Methods used for identification were given in Table 18.

In response to a second question about available referral agencies, 90.6% of the judges stated that referral agencies were available. The kind of agencies available were listed in Table 19.

Table 18. Number and percentage of judges giving methods used for identification of problem drinkers

Response	Number	Percentage
Evaluation at local alcoholism or mental health centers	24	30
Discussion in the court room	17	35
Pre-sentence investigation or evaluation by court services personnel	15	31
		n=72

Table 19. Number and percentage of judges giving available referral agencies for problem drinkers

Referral Agency	Number	Percentage
Local alcoholism or other treatment units	69	96
Mental health units	12	17
Alcoholic Anonymous	17	24
Behavior modification course offered by the state	2	3
Probation[a]	2	3
		n=72

[a]It seems likely that probation is offered in most areas. Many judges probably did not consider this an appropriate response to the question.

The data about referrals seems to suggest that while some teachers of Drinking Drivers' Courses have the help of the judges in properly identifying the problem drinkers, a great many do not. Most teachers do have referral agencies available once identification is made, however.

Set 3: Suggestions for improvement of schools Many judges, 47%, did have suggestions to make about changes in the program. The response to this question is shown in Table 20.

Table 20. Number and percentage of judges giving suggestions for improvement of DDC course

Comments	Number	Percentage
Harsher penalties, including mandatory license suspension and mandatory attendance in the Drinking Drivers' Course	14	34
Changes in court procedures, including changes in use of temporary permit, uniform sentencing of OMVUI convictions, and attendance at class before sentencing	13	32
More follow-through on classes and feedback to judges	14	34
	n = 41	

Student participants' attitude study

In a pilot test, questionnaires were given to six classes under three different instructors at DMACC. Results were then computed by teacher rather than by class. After revisions, the test was then given to classes at 12 other community college locations. The Sioux City location was excluded because the population of their classes is unique in the state. Mason City and Marshalltown, Bettendorf and Burlington locations were also excluded because no DDC classes were held during the testing period or because instructors did not wish to participate. Numbers of participants in each study are included below with the results of each study.

Product, compliance The questionnaire given to participating students consisted of two sets, one surveying attitude changes, the other surveying behavior changes. Responses to both sets are discussed in Table 21.

Set 1: Attitude changes As indicated in Table 21, in all cases the attitude improved in the posttest, and in 75% (9 of 12) cases the differences were significant or highly significant. This seems to indicate that the course does change the attitude of participants.

Because it was felt that some of the instructors and coordinators of particular classes might be interested in

Table 21. Summary of pretest and posttest student attitude scores by area school

DWI Class	Number in class	Pretest Mean Score	Pretest S.D.	Posttest Mean Score	Posttest S.D.	Gain Score	t-value
DMACC I	45	5.78	.99	6.29	.96	.51	4.13**
DMACC II	23	5.24	1.23	6.05	1.19	.81	4.06**
DMACC III	12	5.66	.81	6.30	.80	.64	3.75**
Muscatine	12	5.89	1.05	6.11	1.14	.22	1.34
Calmar	14	5.68	1.12	6.17	.85	.50	1.60
Waterloo	20	5.40	1.02	6.22	1.04	.81	3.26**
Ft. Dodge	14	5.40	1.10	6.48	.69	1.08	3.43**
Council Bluffs	21	5.35	.91	6.14	.84	.79	4.47**
Clinton	6	5.45	1.01	6.13	1.09	.68	1.57
Creston	11	5.68	.97	6.83	.53	1.15	4.84**
Dubuque	14	5.61	1.16	6.40	.89	.76	2.61*
Sheldon	9	5.32	.60	6.43	.72	1.11	4.13**
Ottumwa	14	5.90	1.02	6.46	.85	.56	3.01**
Iowa Lakes	13	5.05	.89	6.25	1.10	1.19	3.77**
Cedar Rapids	16	4.75	.70	6.06	1.09	1.28	4.30**

*Significant at .05.

**Significant at .01.

the frequencies of particular gain scores in their classes, histograms of gain scores per class have been provided in Appendix F. It should be noted that these histograms indicate that many students decreased in attitude scores even though the majority increased.

A third mailed follow-up was carried out six weeks after classes were completed in the DMACC pilot study in an effort to see in what way attitudes toward drinking and driving changed in the six weeks after completing the course. While the response to this questionnaire was not large (39%; n=31) the answers can be compared to responses from the posttest as shown in Table 22.

Table 22. Summary of posttest and 6 weeks follow-up student attitude scores for DMACC pilot study

DDS Class:	All DMACC classes	
Number in class:	31	
Posttest:	Mean score	6.41
	S.D.	.87
Six weeks:	Mean score	6.42
	S.D.	.90
Gain Score:	.004	
t-value:	.03	

These figures indicate that the attitude changed very little in the six weeks after taking the course, and they also show that it is impossible to reject the possibility that there were no differences even though small differences were shown.

For several reasons, including a low response rate, the appearance of little change after six weeks, a feeling that the answers of those who did respond may not be representative of the whole group, and phone calls from participants complaining of harassment by the DPS, the third follow-up was eliminated when the questionnaire was administered to the rest of the state.

Set 2: Changes in drinking and driving behavior

In the DMACC pilot test, an attempt was made to determine changes in behavior by asking a set of questions before, immediately after, and six weeks after taking the course, about drinking and driving behavior. With the elimination of the third mailing, however, the usefulness of these questions became minimal, since an essential part of the questionnaire was the before and six weeks after comparison. Because of this, this set of questions was not used when the questionnaire was administered to the rest of the state. However, pretest, posttest and six weeks follow-up responses for all DMACC classes are provided below. It should be noted again

that the number of responses to the six weeks follow-up were low (39%, n=31), not necessarily representative of the entire group, and that some of the answers were irrelevant and could not be used. Pretest and posttest scores are provided for the entire group of 80 respondents. The 31 six weeks follow-up scores are then provided along with the pretest and posttest scores of those 31 individuals.

Three questions were asked about the amount drunk before driving. One question asked students to list the highest number of drinks that they had drunk on one occasion and still drove. The mean response before taking the class was 5.68 (n=60) and after taking the class it was 6.34 (n=56). For the six weeks respondents, the mean was 5.46 (n=22) on the pretest, 5.56 (n=25) on the posttest, and 1.88 (n=24) on the six weeks follow-up. The increase in the posttest score may be accounted for by an increased openness in the students after completing the course. It should be noted that the mean dropped drastically in the six weeks follow-up for those responding students.

A second question asked students how many drinks that they thought that they would have to have before they would be considered legally drunk. Their response was compared to their response about their own weight to determine a correct answer. The number of correct responses increased from 26.9%

(n=78) to 46.8% (n=79) in the entire group. In the six weeks follow-up group, the scores were: pretest: 23.3%, (n=30); posttest: 41.9%, (n=31); 6 weeks: 72.4%, (n=29). There is an indication that knowledge about what constitutes illegal intoxication while driving increased as a result of taking the course, and especially increased in the six weeks follow-up.

A third question asked how many times students were drinking heavily and drove anyway, and why they did so. Mean responses for the number of times drinking heavily and driving decreased in the posttest from an average of 3.15 (n=62) to 2.61 (n=66) in the entire group. There was also a decrease in the six weeks follow-up (pretest: 1.74, n=23; posttest: 1.83, n=29; six weeks: 1.25, n=20).

All reasons given in the third question for driving after drinking heavily are given in Table 23.

Three questions were asked regarding alternatives to drinking and driving. When asked, in the first question, what alternative to drinking and driving they used, the responses are given in Table 24.

A second question was asked about the number of times students did and did not insist that friends use an alternative to driving when drinking heavily. The mean response for the number of times students said they insisted that friends use an alternative to drinking and driving increased in the

Table 23. Number and percentage of students giving reasons for driving when drinking heavily

Response	Entire Group				Six Weeks Follow-up					
	Pretest		Posttest		Pretest		Posttest		6 weeks	
	No.	%	No.	%	No.	%	No.	%	No.	%
Too drunk to know better	10	27	20	48	3	27	7	39	-	-
By themselves	13	36	17	41	4	36	6	33	2	67
No one going my way	2	6	1	2	1	9	-	-	-	-
No money	2	6	-	-	1	9	-	-	-	-
In a hurry to go home	5	14	2	5	3	27	2	11	-	-
No buses running	1	3	1	2	1	9	1	5.5	-	-
Too far to walk home	1	3	1	2	-	-	1	5.5	1	33
Car needed at home	4	11	2	5	-	-	1	5.5	-	-
Not far to go	4	11	1	2	-	-	-	-	1	33
	n=36		n=43		n=3		n=11		n=17	

Table 24. Number and percentage of students giving alternatives used for driving after drinking heavily

	Entire Group				Six Weeks Follow-up					
	Pretest		Posttest		Pretest		Posttest		6 Weeks	
	No.	%	No.	%	No.	%	No.	%	No.	%
Asked someone else to drive	36	51	36	60	12	48	13	54	9	39
Called a relative	18	25	10	17	2	8	3	12.5	1	4
Took a cab	1	23	12	20	8	32	6	25	5	22
Not drunk, or drunk on only one occasion	13	18	9	15	-	24	-	25	8	35
Slept in car	7	10	2	3	5	20	1	4	2	9
Took a bus	2	3	3	5	2	8	1	4	-	-
Walked	13	18	9	15	4	16	3	12.5	5	21
Stayed where I was	11	15	10	17	2	8	4	17	2	9
Stayed in a hotel or motel	-	-	-	-	1	4	1	4	-	-
	n=71		n=60		n=25		n=24		n=23	

posttest (pretest: 2.07, n=58; posttest: 2.39, n=62) and also in the six weeks follow-up (pretest: 2.09, n=22; posttest: 3.16, n=25; 6 weeks: 4.00, n=9). This increase in number of times was also true of a third question about the number of times they did not insist that friends use an alternative to drinking and driving in the entire group (pretest: 1.43, n=53; posttest: 1.51, n=55) and in the six weeks group (pretest: 1.20, n=20; posttest: 1.92, n=25; 6 weeks: 2.14, n=7). It is unclear why the mean results increased for both questions. It may indicate a misunderstanding of the questions.

In summary, it appears that for the reasons given above, this set of questions does not seem to be a suitable device for evaluating behavioral changes in student offenders. However, it may be that the questions could be used as a learning device by teachers or as a device by which teachers could gather information about students.

Completed students' questionnaire

Three statewide mailings were sent to 495 participants who had completed the course between January 1, 1974 and December 31, 1975. 206 persons returned the questionnaire, 34 were sent to wrong addresses and 255 did not respond.

Input, feedback One question asked students about the acceptability of the class schedule and suggestions for improving it.

89.77% (n=175) said the schedule was acceptable. 10.3% (n=20) said that it was not. Of those who said it was not, suggestions for improvement were as follows:

Table 25. Number and percentage of students giving suggestions for improvement in the DDC schedule by students

Suggested changes	Number	Percentage
Nonspecific		
Have the class be shorter with fewer hours	7	29
Have the class be longer with more hours	6	25
Have the class during the day time	5	22
Have the class on weekends	2	8
Pay a larger fine and have a shorter class	1	4
Specific		
Have the class two times a week for two weeks	1	4
Have the class three times a week for one week, four hours per night	1	4
Have the class five times a week for two weeks, two hours per night	1	4
	n=25	

Process, feedback Four questions were asked about the movies used in the class which is one method that is used on a statewide basis. Most of the classes use the same or similar movies. The responses to these questions were as follows:

Table 26. Rating of movies by students

Method	Rating
1. Rating of amount of time spent on movies: 3 point scale as follows: 1 - a lot 2 - just right 3 - too little	2.2
2. Rating of relevance of the information in the movies: 3 point scale as follows: 1 - not relevant 2 - somewhat relevant 3 - quite relevant	2.25
3. Rating of newness of information: 3 point scale as follows: 1 - something I already knew 2 - partly new 3 - almost all new information	2.2

In response to a fourth question, 50% of the respondents made comments about the movies which can be categorized as follows:

Table 27. Number and percentage of students giving comments about DDC movies by students

Statements	Number	Percentage
Positive statements		
The movies were good	55	61
Negative statements		
The movies were not good, or not effective	6	7
Method suggestions		
Should make more use of movies	6	7
Should show movies to more of the public, such as part of a drivers license exam	9	1
Content suggestions		
Up date the content of the movies	5	6
Do not use so much shock treatment	4	4
Use more shock treatment	6	7
Use more medical and alcoholism information	9	1
Provide more information on beer drinking, less on liquor drinking	1	1
More information on alcoholics anonymous	1	1
	n=90	

One question was also asked about improvements to the course. Suggestions for improvements were categorized as follows:

Table 28. Number and percentage of students giving suggestions for improvement in DDC course

	Number	Percentage
Relating to schedule changes		
Have a follow-up class after probation	1	3
Have more time spent in class	6	19
Have the class in one week	1	3
Relating to methods changes		
Less talk	1	3
More movies	6	10
Do not treat us like alcoholics	1	3
More discussion of legal matters	1	3
Use more shock tactics	2	6
More class discussion	3	9.5
Use a workbook	1	3
Relating to student population changes		
Screen students for problem drinkers drinkers	2	6
Relating to community involvement		
Bring the class to the public's attention	3	9.5
Use the class in high school drivers' education	2	6
Send participants to church for four weeks	1	3.5
	n=30	

Product, feedback Three questions were asked that related to the effectiveness of the class. The responses to these questions were as follows:

The first question asked was whether students would have preferred to pay a fine, an additional fine or some

other penalty rather than take the course. In respone to this question 94.8% (n=181) replied no, 5.2% replied yes. Of the 5.2% (10 persons) that replied that they would have preferred some other penalty, 60% (n=6) said that this was because the class was inconvenient since they had to come in from out of town or they had to get off work. 40% (n=4) said that they attended the course because they thought it would give them some advantage such as a work permit for driving and since it did not they would have preferred a fine.

Respondents replied to a second question about change brought about in themselves or others, 93.5% (n=173) stating that they felt changes were actually brought about. These respondents were then asked to rate the change that was brought about, the average response being 1.43 (n=185) on a 3 point scale, 1 being "a lot", 2 being "some" and 3 being "hardly any".

A third question asked what changes were brought about as a result of the class. Responses are given in Table 29.

Table 29. Number and percentage of students giving statements of changes brought about by the DDC course

Changes	Number	Percentage
Changes related to drinking and driving		
Do not drink and drive as much; use alternatives	71	42
More aware of the consequences of drinking and driving	39	23
Changes related to drinking		
Do not drink so much or not at all	34	20
More aware of the effects of alcohol	26	15
Changes related to driving		
More respect for the privilege of driving	2	1.1
No changes		
No change or very little change	13	7.6
	n=170	

Teachers' and coordinators' questionnaire

With two exceptions the same questions were asked of teachers and coordinators. Because of this these two groups will be treated together so that their responses can be compared. Those questions that were asked only of teachers will be treated in a separate section below.

Seventeen coordinators and 25 teachers (total 42) were sent questionnaires to which 10 coordinators and 21

teachers (total 31) responded. A spot check of persons not responding indicated that several coordinators did not respond because they felt the questionnaire would be more appropriately filled out by teachers. There did not appear to be any particular reason why teachers did not respond. Responses were received from all area schools except Western Iowa Technical Community College at Sioux City. Western Iowa was not included in the survey because the population of the classes in this area are different than in the rest of the state.

Input, compliance One question asked if the class outline provided by the DPI was used in the class. 100% of teacher and coordinator respondents replied that the outlines were used.

Input, feedback Three questions were asked regarding feedback about schedule, student population and class outlines. The results were as follows:

The first question was about improving the weekly and hourly schedule of the class. 22% (n=7) of the population felt that the schedule could be improved, of which 14% (n=1) were coordinators and 86% (n=6) were teachers. Responses about ways in which to improve the schedule were as follows:

Table 30. Number and percentage of teachers and coordinators giving suggestions about improvement of the course schedule

Response	Teachers		Coordinators		Total	
	No.	%	No.	%	No.	%
Have class twice a week for 2 weeks	3	50	1	16.5	4	66.5
Have more hours in the class	1	16.5	-	-	1	16.5
Let local units decide the schedule	1	16.5	-	-	1	16.5
	n=5		n=1		n=6	

Respondents were asked to answer a second question about the value of allowing both problem and social drinkers to attend the class. 19% (n=6), 67% (n=4) teachers, 33% (n=2) coordinators, replied that the class could be improved if only social drinkers were referred to it. Reasons given for this response were given in Table 31.

81% replied that the class would not be improved if problem drinkers were left out, giving reasons in Table 32.

A third question was asked about class outlines. All respondents said they used the recommended outline. The average response about the usefulness of it was a 1.3 (n=27) (T, 1.5; C, 1.25) on a three point scale, 1 being "very useful". Comments about the class outline are given in Table 33.

Process, compliance Four questions asked whether four of the teaching methods and materials recommended by DPI had been used. The responses are given in Table 34.

Five questions asked for feedback about the methods and materials suggested by DPI. Four of the questions were about specific recommendations, and one requested suggestions for improvements to be made by DPI in the class.

The responses to the first four questions about

Table 31. Number and percentage of teachers and coordinators giving reasons why DDC class would be improved by segregation of problem drinkers

Response	Teachers		Coordinators		Total	
	No.	%	No.	%	No.	%
Course has limited effect on problem drinkers	2	33	1	17	3	50
Problem drinkers need treatment	2	33	1	17	3	50
	n=4		n=2		n=6	

Table 32. Number and percentage of teachers and coordinators giving reasons course would not be approved by segregation of problem drinkers

Response	Teachers		Coordinators		Total	
	No.	%	No.	%	No.	%
Would have a problem defining problem drinkers	6	40	1	14	7	32
All need the class, problem drinkers need additional help	5	33	2	29	7	32
Need a mix in the class; they learn from each other	5	33	4	57	9	41
The present system seems to work	1	7	1	14	2	9
	n=4		n=2		n=6	

Table 33. Number and percentage of teachers and coordinators suggestions for improvement of class outline

Response	Teachers		Coordinators		Total	
	No.	%	No.	%	No.	%
Needs updating	6	60	1	10	7	70
We develop our own, in part	1	30	1	10	2	20
Cannot function on such a rigid structure	1	10	-	-	1	10
	n=8		n=2		n=10	

Table 34. Number and percentage of teachers and coordinators using recommended methods

Method	Personnel using the Method	
	No.	Percent
Pamphlets		
Teachers	16	76
Coordinators	6	83
Movies		
Teachers	20	95
Coordinators	7	100
References		
Teachers	15	75
Coordinators	4	75
Data Forms		
Teachers	20	100
Coordinators	7	100

specific methods are as follows:

1. Of respondents using recommended pamphlets the average reply about effectiveness was a 1.5 (T:1.4, C:1.8) on a 3 scale. Comments about pamphlets are given in Table 35.

Table 35. Number and percentage of teachers and coordinators giving comments about DDC pamphlets

Response	Teachers		Coordinators		Total	
	No.	%	No.	%	No.	%
Need to update	3	27	3	27	6	54
Students not interested, cannot comprehend	3	27	-	-	3	27
Too difficult to obtain	2	10	-	-	2	10
	n=8		n=3		n=11	

2. In regard to movies provided by DPI, the average usefulness rating of respondents using them was a 1.33 (T: 1.25, C: 1.6). Comments about movies are shown in Table 36.

Table 36. Number and percentage of teachers and coordinators giving comments about DDC movies

Response	Teachers		Coordinators		Total	
	No.	%	No.	%	No.	%
Used other films than those provided	4	40	3	75	7	50
Need updated films	6	60	-	-	6	43
Need educational films; not scare tactics	-	-	1	25	1	7.1
Are difficult to obtain	1	10	-	-	1	7.1
	n=10		n=4		n=14	

3. Of the respondents using recommended references, the average usefulness rating was 1.78 (T: 1.8, C: 1.75). Comments were as follows:

Table 37. Number and percentage of teachers and coordinators giving comments about DDC references

Response	Teachers		Coordinators		Total	
	No.	%	No.	%	No.	%
Needs updating	1	17	1	17	2	34
Are not aware of any references	1	17	2	33	3	50
Do not have enough time to use	1	17	-	-	1	17
	n=3		n=3		n=6	

The average response by respondents using data forms about usefulness was 1.89 (T: 1.95, C: 1.67). Comments about the data forms were as follows:

Table 38. Number and percentage of teachers and coordinators giving responses about DDC data forms

Response	Teachers		Coordinators		Total	
	No.	%	No.	%	No.	%
Questions are confusing	2	22	1	50	3	27
Has no relevance/does not meet our purposes	4	44	-	-	4	36
Personal form not useful	1	11	-	-	1	1
Some aspects violate confidentiality	1	11	-	-	1	1
Needs to be used with a follow-up	-	-	1	50	1	1
Need to add a self-inventory of drinking patterns	1	11	-	-	1	1
	n=9		n=2		n=11	

The responses to the fifth question about general improvements in the course are as follows:

Table 39. Number and percentage of teachers and coordinators giving suggestions to DDC course improvement

Response	Teachers		Coordinators		Total	
	No.	%	No.	%	No.	%
Need more information from law enforcement personnel	6	37.5	1	25	7	35
Update materials	6	37.5	2	50	8	40
Separate social and problem drinkers	2	12.5	-	-	2	10
Solve problems with arrest procedures	1	6	1	25	2	10
Better coordination among area schools	-	-	1	25	1	5
More information on class activities, like discussions	1	6	-	-	1	5
More follow through of problem drinkers	1	6	-	-	1	5
	n=16		n=4		n=20	

Process, local variation One question was asked about variations made in class methods or materials. The responses were as follows:

Table 40. Number and percentage of teachers and coordinators giving responses about local variations in DDC course methods or materials

Responses	Teachers		Coordinators		Total	
	No.	%	No.	%	No.	%
Sifted emphasis to self-assessment: matched up students with similar problems, had students write letters to themselves	2	12.5	1	14	3	13
Reduced or added to or changed test questions	2	12.5	1	14	3	13
Used other films	2	12.5	1	14	3	13
Asked participation of local alcoholism or other groups	2	12.5	1	14	3	13
Had more discussion groups or workshop type classes	5	31	-	-	5	22
Added our own material	2	12.5	1	14	3	13
Used news accounts of local OMVUI accident arrests	1	6	-	-	1	4
Made no changes	-	-	3	43	3	13
	n=16		n-7		n-23	

Product, feedback Four questions asked teachers and coordinators for feedback about the effectiveness of the program, and about methods needed to improve their effectiveness. Responses to these questions were as follows:

The first question asked for a rating of the class on

a 5 point scale, 1 being "very effective". The average response was between "very" and "rather" effective, though closer to "rather" (1.89, n=27; T: 1.79, n=19; C: 2.125, n=8).

Those persons who responded that the class was not very effective were asked in a second question what evidence made them respond in this way. Only one answer was provided to this question, and only 10% (n=3) of the entire group responded. The response was that rearrests of persons who had taken the class indicated that the class was not effective. Three persons gave this answer, two of whom were teachers, one being a coordinator.

When asked a third question about what kind of feedback received indicating that the class was effective, respondents replies are given in Table 41.

A fourth question about effectiveness was asked about the kind of in-service training for teachers that respondents would like to see in order that teachers might become more effective. The responses are given in Table 42.

Table 41. Number and percentage of teachers and coordinators giving reasons that the class was effective

Response	Teachers		Coordinators		Total	
	No.	%	No.	%	No.	%
Observed students learning	2	11	1	12.5	3	11.5
Students said it was effective	12	67	4	50	16	61.5
Comments from members of the community	1	5.5	-	-	2	8
Low recidivism	4	22	4	50	8	31
Student evaluation forms	2	11	-	-	2	8
	n=18		n=8		n=26	

Table 42. Number and percentage of teachers and coordinators giving suggestions for in-service training

Response	Teachers		Coordinators		Total	
	No.	%	No.	%	No.	%
Provide and discuss materials	4	22	2	33	6	25
One day workshop	3	17	1	17	4	17
Workshop on a quarterly basis	4	22	-	-	4	17
Have a dialogue with other teachers or law enforcement or medical personnel	5	28	2	33	7	29
Therapy or group dynamics training	2	11	-	-	2	8
Actual classroom critique or example	2	11	-	-	2	8
Use of media	-	-	1	17	1	4
Make the workshop mandatory	1	6	-	-	1	4
	n=16		n=9		n=25	

Teachers' questionnaire

Questions about identification and referral of problem drinkers were asked only of teachers. Of the 25 teachers who received questionnaires, 15 responded.

Product, compliance Two questions were asked about compliance with legislative intentions that teachers identify and refer problem drinkers. In response to the first question, 87% (n=13) said that they did identify problem drinkers. In response to a second question, 67% (n=10) said that they did refer problem drinkers for treatment.

Product, feedback Six questions asked about identification and referral of problem drinkers. The response to the first question about percent of persons per class who were problem drinkers is given in Table 43.

Table 43. Number and percentage of teachers giving determination of percent of DDC students as problem drinkers

Percent problem drinkers	Teachers	
	No.	%
1-5%	1	7
5-10%	1	7
10-20%	2	13
20-40%	11	73
	n=15	

The average response was 16%.

In response to a second question about processes used for identification of problem drinkers, the responses are given in Table 44.

Table 44. Number and percentage of teachers using processes used by teachers for identification of problem drinkers

Process	Teachers	
	No.	%
Formal methods like the Mulford Johns Hopkins questionnaire	2	15
Informal methods like the "Who has a problem" analysis	9	69
Outside of class by an alcoholism agency	5	39
Outside of class when getting a driving permit	2	15
	n=13	

The average response to a third question about treatment referrals of problem drinkers from the last class taught by teachers was 4.9 (n=7) persons. The average response to a fourth question about the average number of treatment referrals from most classes was 3.3 (n=9) persons.

In response to a fifth question about agencies to which treatment referral of problem drinkers was made, the responses were as follows.

Table 45. Number and percentage of teachers giving agencies to which problem drinkers are referred

Agencies	Teachers	
	No.	%
Local alcoholism agencies	9	90
Veteran organizations, clergy or alcoholic anonymous	2	20
	n=10	

A sixth question asked for comments about identification and referrals of problem drinkers. The responses were as follows:

Table 46. Number and percentage of teachers giving comments about DDC student identification and referrals

Comments	Teachers	
	No.	%
Alcoholism agency staff does most of identification and referral	5	83
We do not have enough staff to do either of these	2	33
We did not know we were supposed to identify and refer problem drinkers	1	17
We would like to see problem and social drinkers separated, and problem drinkers not included in the class	1	17
	n=6	

Conclusions and Recommendations

The preceding section has discussed the results of the DDC evaluation study. This section further discusses those results and provides conclusions and recommendations about them. Information is organized by areas input, process, outcome, and by compliance feedback, and local variation categories. Conclusions and recommendations are also made about the overall program.

Input

Course input was determined to be the population sentenced to the class by judges and the class outline or format and schedule recommended by the DPI and DDC advisory committee.

Compliance In regard to schedule and course outline, teachers and coordinators who responded indicated that they complied with DPI guidelines all of the time.

Feedback In regard to feedback about the population sentenced to the course, it appears that judges did not necessarily use the sentencing alternative of referring persons with first OMVUI convictions to the course. Their responses indicated that an average of 7% of persons with first OMVUI convictions were not referred, and 22% of the judges indicated that they did not refer over 30%

of the people. Responses made by many judges seemed to indicate that their reasons for not sending offenders to the course had a specific basis, the most common reasons being that the offender was a nonresident (26%) or had been arrested before (21%). However other judges gave reasons for not assigning an offender to the course that were much less specific, and seemed to rest more on the subjective judgement of the judge, the most common being that the offender did not want to or request to go (39%).

Teachers and coordinators also commented about the course population. About 20% of these respondents stated that the course would be improved if problem drinkers were not assigned to it, pointing out that problem drinkers really needed more help than was available in the course. However, 80% of the respondents preferred having both problem and social drinkers in the course, pointing out that they learned from each other, and that problem drinkers should take the class and then get additional help.

In a questionnaire filled out only by teachers, nearly 75% of the respondents replied that between 20-40% of the people in their classes were problem drinkers.

Feedback about class outlines was provided by teachers and coordinators. Most teachers and coordinators seemed to find the class outline more than "somewhat" useful (1.3),

though many commented that it needed updating (70%) and some commented that they had added to it (20%).

Feedback about schedules from teachers and coordinators indicated that about 20% of them, mostly teachers, wanted the schedule improved. The most common suggestion for improvement was to have the class twice a week for two weeks (67%). Completed students also commented on the schedule, over 10% responding that it could be improved. As might be expected, the most common suggestion for improvement was to shorten the course (33%). Other frequent suggestions were to have a longer class (25%) and to have the class during the daytime (22%).

Local variations There appeared to be no local variations to course schedules. Comments were made by teachers and coordinators about variations in class outlines, or format, but the context in which they were made suggested that they were intended to apply more to methods than to the course outline.

Summary and recommendations on inputs

In summary, it appears that for the most part, judges, teachers, and coordinators are complying with the state guidelines on referrals of offenders to the course, schedules, and course outlines, though less on referrals.

Because of the feedback about input, it is recommended that the DPI consider updating the course outline and providing alternative schedules, especially for daytime classes. In regard to the population referred to the classes, the DPI, DPS, the Supreme Court Traffic Court Administrator and legislators should be aware that the reasons why people are sent or not sent to the course are not uniform throughout the state, and that nearly 50% of these reasons seem to be nonspecific, depending on the subjective judgment of the judge. It is recommended that the above group consider whether some means, including legislation or improved communications with judges should be provided for more uniform sentencing. Members of the DPI and DPS, and coordinators should be aware that in some areas 20% to 40% of the course population are considered by coordinators and teachers to be problem drinkers, and that some teachers and coordinators feel that problem drinkers should not be in the course. It is recommended that alternative courses or treatment for problem drinkers including the Sioux City Behavior Modification School be reviewed by the DPI and DPS.

Other comments about problem drinkers are provided in the product section under identification and referral.

Process

Process was determined to include the methods and procedures used in the DDC that were recommended by the DPI in the curriculum guide.

Compliance Methods specifically recommended by the DPI included the use of pamphlets, movies, and data forms. Certain references were also provided for the use of the teachers. Responses from teachers and coordinators indicate that data forms were used in all cases, movies were used in nearly all cases (96%) and pamphlets were used about 80% of the time. References were used about 75% of the time.

Feedback Feedback from teachers and coordinators about pamphlets indicated that they rated usefulness of pamphlets as being midway between "very" and "somewhat" useful (1.5), teachers rating them higher than coordinators. The two most frequent comments about the pamphlets were that they needed to be updated (50%) and that students were not interested in or could not comprehend them (25%).

The average rating of the usefulness of movies by teachers and coordinators was 1.33, a rating closer to "very" useful than to "somewhat" useful, teachers rating them higher than coordinators. The most frequent comments about the movies were that they needed to be updated (43%) and that films other than those provided by DPI were used (50%).

In regard to the use of data forms, teachers and coordinators responded that their usefulness was much closer to "somewhat" useful than to "very" useful (1.89), teachers rating them lower than coordinators. The two most common responses about data forms were that they were irrelevant, or did not meet the purposes of the class, (36%), and that some of the questions were confusing (27%).

Ratings of the usefulness of references by teachers and coordinators were closer to "somewhat" useful than to "very" useful (1.78), teachers rating them slightly lower than coordinators. The two most frequent responses about references were that teachers and coordinators were not aware that they were provided (50%) and that they needed updating (34%). It should be noted that references are listed in the curriculum guide provided by the DPI through teachers and coordinators.

Teachers and coordinators were also asked to comment on improvements they would like to see DPI provide for the class. The two most frequent responses for requests for updating materials (40%) and for more information from law enforcement personnel (35%).

17% of completed students also made suggestions about improving the class. The most frequent suggestions made were that more time ought to be spent in class (19%) and that more movies ought to be provided (19%). Other frequently

made suggestions were that there should be more class discussion (9.5%) and more public participation (9.5%).

Local variations Teachers and coordinators were also asked what variations from DPI recommendations they had made in their classes. The most frequent response was that discussion or workshop groups had been added (22%). The frequency of almost all other responses was same (12%) and included the use of films not recommended by DPI, participation of local alcoholism groups, changes in data form test questions, addition of own material, and a shift in emphasis to self-assessment. 13% of respondents replied that no variations were made, though none of these respondents were teachers, all being coordinators.

Summary and recommendations on process

It appears that teachers and coordinators are using the methods recommended by DPI in the curriculum guide, though suggested references and pamphlets are being used less than other methods.

Feedback information indicated that all of these methods were found to be useful by teachers and coordinators though references and data forms less than some others. However, it is recommended that the DPI may wish to take notice of the frequent request for updating materials in general, and for updating movies, pamphlets, and references

specifically. It is also recommended that members of the DPI review the contents of recommended materials, especially of the pamphlets and movies and solicit recommendations about alternative selections from teachers and coordinators. In addition, it is recommended that the data forms be reviewed for the relevancy and that their purpose be more clearly explained to teachers and coordinators.

A final recommendation is that members of the DPI, or the original DDC advisory committee review the entire contents and format of the curriculum guide. In doing this, they should keep in mind the ratings and comments made about specific methods, and also the variations to the guide used by teachers and coordinators, especially the increased use of discussion and workshop groups. In conducting this review, alternatives and research carried out in other states should be studied particularly the changes in the Phoenix, Arizona program on which the Iowa program was based.

Product

It has been determined that the purposes of the DDC program are to change the drinking and driving behavior of course participants, to reduce subsequent arrests (recidivism) of persons attending the program to change the participants' attitude toward drinking and driving, and to provide for the identification and treatment referral of

problem drinkers.

Compliance Because there is a great deal of information on this topic, it has been identified by source.

Recidivism study An indication of the effectiveness of the course in reducing the recidivism rate of participants of the DDC was provided by a review of the TRACIS data.

Information provided on class and no-class recidivism in Tables 7 and 8, and as summarized below in Table 47 shows that differences between class and no-class recidivism rates are small or nonexistent over a two year period. When looking at all groups with prior convictions for two years, the no-class rates are higher. However, when looking at all groups with no prior convictions, the recidivism rate of the class group is higher. In addition, rates for the no-class group are higher than for the class group, when not including reckless driving charges, but are lower when including reckless driving charges, though the differences are very small and not statistically significant. Because the differences are so small and inconsistent, it must be concluded that there is no evidence by which to reject the hypothesis that DDS class completion makes no difference in the recidivism rates of OMVUI offenders in a two year period, though neither is there any strong evidence for

Table 47. Cross tabulation of class and no-class recidivism rates with prior and no-prior convictions including and not including reckless driving convictions for eight quarters

	Class			No-class			Total		
	Prior	No-prior	Total	Prior	No-prior	Total	Prior	No-prior	Total
Reckless driving not included	14.4	7.7	8.8	18.0	6.8	9.0	16.2	7.3	8.9
Reckless driving included	16.3	8.8	10.0	18.7	7.8	9.9	17.5	8.3	10.0

accepting it. The results about the effectiveness of the class for a two year period based on this recidivism data are inclusive.

It should be pointed out that the recidivism rates for the two year period change if the rate for offenders who did not attend the class until three or more quarters after their conviction is excluded. The recidivism rate for this group is much higher than for any other group (27.3%) and when excluded, lowers the class recidivism rate from 8.8% to 8.5% when not including reckless driving convictions and from 10.0% to 9.7% when including reckless driving convictions. These decreases are not great, however, and the differences between recidivism rates of class and no-class groups remain minimal, providing no additional evidence by which to reject the hypothesis that the recidivism rates are not affected by class attendance over a two year period. However, it can be concluded from this information that the class is much less effective in lowering the recidivism rate when it is completed three or more quarters after the conviction than when completed less than three quarters after conviction.

Reasons for the inconclusive results about the effectiveness of the class lowering recidivism rates include no random assignment of population to class and no-class groups, and no provision of information about the type of drinkers the

judges sentenced to the class. No random assignment and no identification of drinker type mean that it is impossible to be sure that class and no-class groups contain populations with similar characteristics and can validly be compared. It also makes it difficult to know the meaning of the recidivism rates once they are provided. For example, if it were known that judges tended to sentence persons with drinking problems to the class and provide other sentences for persons with no drinking problems, then one would expect that the recidivism races of class completers to be higher than the no-class population. Given the results of this study, it could be concluded that the class was effective, because it kept the recidivism rate of these problem drinkers as low as the recidivism rate of the nonproblem or social drinkers. However, this information is not known. In order to provide more conclusive results it is recommended that further study be carried out which would include identification of class and no-class participants as problem or social drinkers and/or randomly assignment of participants to class and no-class groups.

Table 47 also shows additional information about the DDC that should be of interest to persons involved in the DDC program, though not indicative of the effectiveness of the class. The table shows that persons with prior OMVUI convictions tend to have higher recidivism rates than those

persons with no prior convictions. These differences, all of which are statistically significant, are not surprising, because many problem drinkers, from which higher recidivism rates can be expected, are likely to fall into the prior group. Social drinkers, on the other hand, from whom lower recidivism rates can be expected, are likely to fall into the no-prior conviction group.

When looking at the recidivism data from a one year period, summarized in Table 48 differences between class and no-class groups are statistically significant, providing evidence by which to conclude that in the first year after treatment, attendance in the class does effect the recidivism rate. When comparing the two prior class, no-class subgroups and the two no-prior class, no-class subgroups, significant differences are apparent in only one case out of four. This suggests that some additional variable, such as the BAC arrest level, is working with the class treatment and prior convictions variables to cause differences. Differences between prior and no-prior rates are again significantly different, again favoring the no-prior group.

Comparison of recidivism rates by group by quarter shows small or nonexistent differences, and does not provide information from which to draw conclusions about the effect of the class per quarter. The overall pattern or recidivism frequencies by quarter shown in Figures 4 and 5 provides more

Table 48. Cross tabulation of class and no-class recidivism rates with prior and no-prior convictions including and not including reckless driving convictions for four quarters

	Class			No-class			Total		
	Prior	No-prior	Total	Prior	No-prior	Total	Prior	No-prior	Total
Reckless driving not included	6.2	3.7	4.2	10.1	4.7	5.7	8.3	4.2	4.9
Reckless driving included	7.5	4.5	5.0	10.4	5.5	6.5	9.0	5.0	5.7

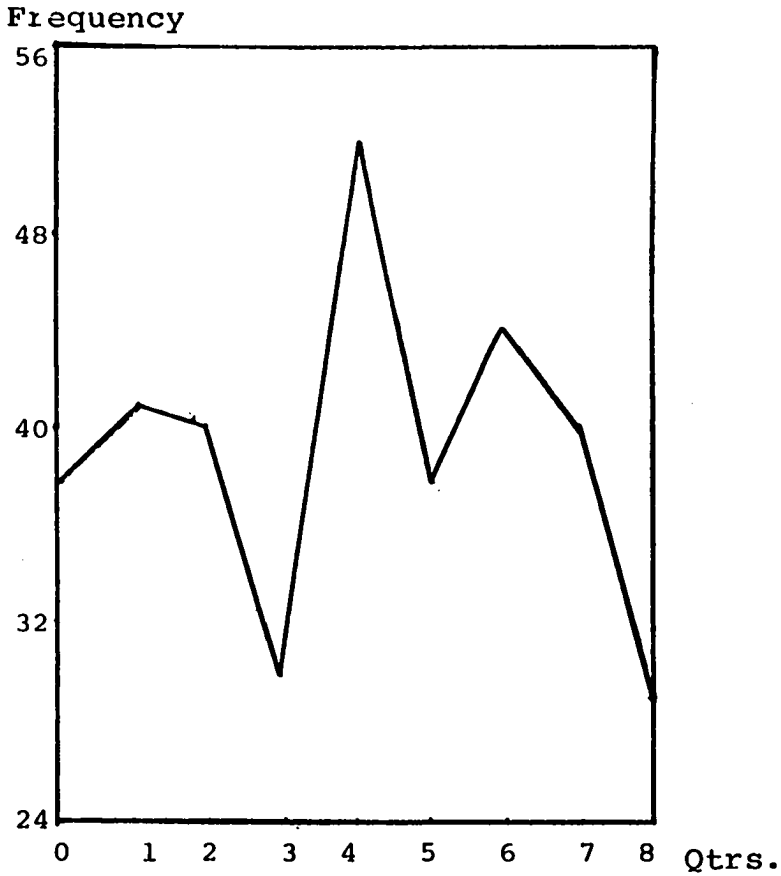

Figure 4. Frequency of recidivism for all groups per quarter including reckless driving convictions

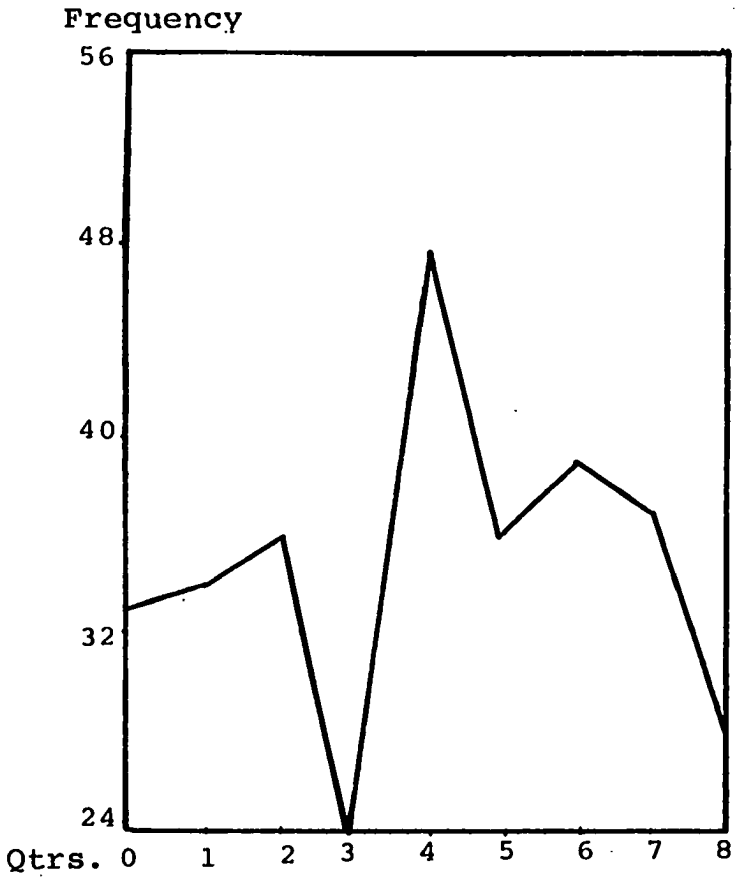

Figure 5. Frequency of recidivism for all groups per quarter, not including reckless driving convictions

information, though it is an additional finding and not directly related to class effectiveness. There appears to be no ready explanation for the patterns shown in these figures, though tentative explanations can be put forward. The immediate increase in rates may be dues to "instant recidivism", a phenomenon described by David Struckman of the Human Factors Laboratory of the University of South Dakota as occurring when drivers will drink and drive for a short period of time no matter what kind of treatment occurs, or perhaps especially if treatment does occur, usually caused by short-term emotional problems. The decrease in the seventh and eighth quarters may be due to delays in court process causing delays in coding the recidivism data onto the TRACIS files. The seventh and eighth quarters for those members of the population whose first conviction or class completion came near the end of the July 1, 1973-June 30, 1974 period occurs around June 1976. Convictions for subsequent OMVUI arrests for this period may not have taken place if delayed in the courts, or may not yet have been coded into the TRACIS system.

There does not seem to be any adequate explanation for the sharp decrease and increase in the third and fourth quarters. Suggested explanations are that the fourth quarter marks the end of the probationary period for many people, or that the effects of the DDC class wear off after

a year. Other suggestions are that there are times of the year when there are high OMVUI arrest or conviction rates which appear in the pattern, or that this is the recidivism rate pattern for most drinking drivers. To this researcher, it seems likely that the pattern is the result of several interacting variable occurring at the same time by chance. However, it is recommended that further study be carried out on this subject before any conclusions are reached.

Comment should be made about another additional finding of the study, the number of times persons were convicted of OMVUI and the number of times they attended the DDC class. The data shows that 4.8% (n=170) of the total number of offenders in this study were convicted of OMVUI three times, and that 1.8% (n=65) were convicted four or more times. This is true even though a third conviction for OMVUI is a felony, and is usually followed by a harsh sentence. The data also shows that of all persons attending the class, 5.3% (n=100) attended the class two or more times. The class is not intended to be used repeatedly, and it is unclear what effect if any, the class would have the second, third, or fourth time.

Participating students' attitude study Results of the Simon attitude test given to course participants indicate that the class is effective in changing the atti-

tude toward drinking and driving in most of the area college classes. This is so since the attitude in all classes improved, most at a statistically significant level. Some perspective on the average gain score of all students in the Iowa DDC who took the test can be gained by comparing these scores with the Simon attitude test gain scores from similar classes in other states (37, pp. 260-261). The comparison is provided in Table 49.

It should be pointed out that the validity of this comparison is limited since the attitude gain scores of problem and social drinkers are likely to be different, social drinkers being likely to improve their attitude more than problem drinkers and because none of these classes have indicated the numbers of social and problem drinkers in the class, though both groups are included in all classes. For example, the gain score of the Phoenix group is higher than that of the Westchester group, but it is unclear whether this is because the class was better at changing attitudes or because there were more social drinkers in the class.

Teachers Teachers were asked about the way in which they complied with legislative intentions that they identify and refer problem drinkers. While the respondent rate to these questions was low, it appears in most cases teachers do identify drinkers though not in any uniform way,

Table 49. Comparison of attitude study results from Iowa, Phoenix, Arizona and Westchester, New York DDC classes

Class	Pretest			Posttest			t-value
	Number in class	Mean score	S.D.	Mean score	S.D.	Gain score	
Total Iowa	245	5.50	1.02	6.26	.94	.77	12.50**
Phoenix, Arizona	81	5.59	.96	6.15	.95	.56	5.30**
Westchester, New York	335	5.60	1.15	6.04	.83	.44	7.31**

**Significant at .01.

and do refer them to rehabilitation agencies. Identification appears to be made more often than referrals, though this may be because other community agencies, like alcoholism centers, have made themselves responsible for referrals after after identification is made.

Judges Judges were also asked about the way in which they identify and refer problem drinkers, though it is not necessarily their responsibility to do so. More than half (55%) of the respondents indicated that they did identify problem drinkers, 90% indicated that referral agencies were available in their area, though they did not necessarily refer all offenders to them.

Feedback Since there was a large amount of information on this subject, it has been categorized by source to avoid confusion.

Judges Feedback from judges about course effectiveness seemed to indicate a cautious acceptance of the course. The average response rating effectiveness was between "rather" and "somewhat" effective, though nearer to "somewhat" (2.89). However, the average rating of the way students view the course was halfway between being a "soft" and a "reasonable" penalty (1.58). Only a minority of the judges felt that the class should be eliminated (15%). As

was noted earlier, however, only 3/4 of the respondents replied to these questions, which seemed to indicate their caution in giving a rating. The caution of the judges about answering some of the questions on effectiveness may be explained by their own rating of the information on which these responses were based. Most judges rated their information as being between "somewhat" and "not at all" complete (2.44), though between being "very" and "somewhat" reliable (1.69). Only a small minority of judges said they had attended the course (2%), though some said they would like to, if asked. Most of the information about the course appeared to come from defendants (36%) and from lawyers (30%).

In regard to identification of problem drinkers by judges, the procedures most frequently used for referral were evaluation by local alcoholism or mental health centers (50%), informal courtroom discussions (35%) and presentence or court services evaluation (31%). The two referral agencies most frequently cited by judges as being available were local alcoholism and mental health centers (95%) and Alcoholics Anonymous (24%).

Responses given by judges about ways to improve the effectiveness of the class indicated that they would prefer the use of harsher penalties (34%), more follow-

through on classes and feedback to judges (34%) and change in court procedures (32%).

Completed students Responses given by completed students about the effectiveness of the class indicated that most participants preferred taking the class to paying a fine (95%). Most of the students also seemed to think that some change was brought about, (93.5%) and that this change was between "a lot" and "some", though somewhat nearer to "a lot" (1.43). When asked what responses were brought about, the most frequent response made by participants was that they did not drink and drive as much or used alternatives (42%), that they were more aware of the consequences of driving (23%), and that they did not drink so much (20%).

General comments made about the class also provided an indication of effectiveness, the most frequent response being that the course was good and provided help (74%), though over 25% of the participants made negative comments about the unfairness or ineffectiveness of the course.

As was pointed out earlier, it is difficult to determine how representative the responses made by completed students are. It is possible that respondents were intimidated by the DPS letterhead on questionnaires, or that only persons with positive attitudes or strongly negative attitudes toward the course, felt motivated to return the questionnaire.

Teachers and coordinators Most teachers and coordinators appeared to feel that the course was effective, the average effectiveness rating of teachers and coordinators being between "very" and "somewhat", though closer to "somewhat" (1.89). The most frequent responses to a question asking for evidence that the course was effective. were that students said it was effective (61.5%) and that recidivism rates were low (31%). However, the evidence given by respondents who did not feel that the class was effective was that recidivism rates were high. It is unclear from what sources this contradictory information about recidivism came. When asked what kind of in-service training was needed to make the class more effective, the most frequent responses were having discussions with other teachers and law enforcement or medical personnel (29%) or having classroom materials provided and discussed (25%).

Teachers Feedback responses by teachers alone about identification and treatment referral problem drinkers indicated that most teachers did identify problem drinkers. It also indicated that various methods were used for doing so, the most frequent being informal methods used within the class such as "who has a problem" data forms supplied by DPI (69%) or identification made outside the course provided by local alcoholism agencies (38%). Most reachers also

made treatment referrals, though fewer than identified problem drinkers. The agency to which referrals were most often made were local alcoholism agencies (90%). The most frequent general comments made about identification and referrals was that the local alcoholism agencies did most of it (83%) or that not enough staff was available (33%).

Summary and recommendations on outcomes Data received from the recidivism study, the attitude study, and from responses from class completers, judges, teachers and coordinators indicate that the course is somewhat effective in carrying out its purposes of changing drinking and driving behavior and attitudes, and identification and referral of problem drinkers. This appears to be so since the recidivism rate is lowered in some cases, attitudes are changed, some identification and referral is made, and teachers, coordinators, students and judges claim that the class is effective in changing behavior.

The recidivism rate does appear to be lowered over a one year period as a result of the course. However, there is no evidence that over a two year period the course has any effect on the recidivism rate. This is the case even when separating from the data those offenders who completed the class three or more quarters after being convicted and had a higher than average recidivism rate. One reason that the

data provides no evidence about the effects of the class is that the drinking driving characteristics that offenders have before they enter the class are unknown. To provide more conclusive results, it is recommended that when undertaking future recidivism studies, an attempt be made to identify problem and social drinkers or to provide random assignment of the population to certain classes. It is especially recommended that BAC levels be included on the OMVUI offender's TRACIS record so that these can be used in identifying problem drinkers.

Over eight quarters, recidivism frequencies show a pattern of initial increase, a final decrease and sharp intermediate increases and decreases. The reason for the intermediate pattern is unclear, though the initial increase can be explained by the "instant recidivist" phenomenon, and the final decrease by delays in coding recent data into the TRACIS system. It is recommended that further study be carried out to provide an explanation for the entire pattern.

An additional finding of the recidivism study was that nearly 5% of the offenders in this population had been convicted of OMVUI three or more times. It was also found that over 5% of the population had been sentenced to and attended the class two or more times. It is recommended that the DPS and the Supreme Court Traffic Court Administrator

develop a policy for treatment of these repeated recidivists and toward repeated class attendance, and communicate it to the appropriate judges.

In regard to coding problems encountered in working with the data, it is recommended that an edit be made to eliminate and correct invalid cases within the traffic records section of the TRACIS system.

There is evidence that a second purpose of the course, changing attitudes toward drinking and driving, is carried out. The results from the Simon attitude questionnaire show that in nearly all of the classes tested, attitudes were changed. However, the validity of the evidence provided by this questionnaire is limited because problem and social drinkers were not identified. It is recommended that in further attitude studies, identification be made of problem and social drinkers, at least by prior OMVUI arrests and BAC levels at time of arrest.

A third purpose of the course is the identification of problem drinkers within the class for purposes of treatment referral. There is evidence that this kind of identification is made, though the effectiveness appears to be limited, because the sophistication of the methods used for identification vary widely. It seems likely that the effectiveness would improve if the DPI and DPS would provide

guidelines, and in some cases, training to teachers for identification and referral of problem drinkers. It is recommended that they do so. In doing so, it is recommended that the DPI and DPS review the procedures used in the Sioux City-Woodbury County ASAP program.

While feedback is not a very accurate indicator of effectiveness, in many cases it does provide information about the validity of the goals of the program, about the attitudes toward the program of people involved in it, and about ways to improve it. The responses from judges, completed students, teachers and coordinators provide this kind of information.

While judges were cautious about evaluating the course, and some of them seemed to have preferred harsher penalties,[1] many expressed an interest in the course, especially in having more feedback from DDC teachers and coordinators. Because of this, it is recommended that the DPI, DPS, and Supreme Court Traffic Court Administrator work to provide a stronger liason among teachers, coordinators, and judges, and especially encourage teachers to make contacts with the

[1]After the judges had returned their questionnaire, but before this study had been completed, the Iowa General Assembly did enact more severe penalties for OMVUI. These do not go into effect until 1978, however, and it is unclear in what way they will affect the DDC program.

judges. Based on judges' responses, it is also recommended that in some cases teachers ask judges to attend the course. Since responses given by several judges indicated a concern about procedures for obtaining driving permits and being admitted to the DDC course, it is recommended that the DPS review these procedures and provide information to judges and to teachers and coordinators on them.

Most of the feedback provided by completed students indicated satisfaction with the course. Specific recommendations based on student responses were discussed in the sections on inputs and processes.

Teachers and coordinators also seemed to indicate satisfaction with the course. As with completed students, most of their specific recommendations have been discussed in the section on inputs and processes. In view of their comments about the kinds of in-service training they wish to receive, however, it is recommended that DPI officials or coordinators consider providing and requiring in-service training on a statewide or local level that includes discussions with law enforcement and medical personnel and other teachers, and also information on materials that could be of use in the course.

Overall conclusions and recommendations

In reviewing the DDC as an entirety there appears to be at least two points about which conclusions and recommendations should be made that have not been provided in the above sections.

One is in regard to final authority over the DDC, especially in regard to final authority for making changes in the program. As was suggested earlier, the original DDC was planned and organized by an advisory committee consisting of representatives from interested groups. DPI was then given responsibility for continuing to develop the curriculum, for ensuring that the program was implemented on a local level, and for receiving and keeping records about class participants. However, final authority over the curriculum was given to the DPS. It is the conclusion of this researcher that while this joint responsibility for the program has resulted in communication between the DPS and DPI, it has also resulted in some uncertainty about final responsibility for the program, especially in regard to making major changes in it. There is an indication that this uncertainty may, in some cases, limit the effectiveness of the course, or at least its adaptability to changing needs. Because of the above conclusion it is recommended by this researcher that legislators consider placing final authority for the program in a single body that includes representatives

of the DPI and DPS and other interested groups, similar to the original advisory committee.

A second point should be made in regard to the research that has been carried out on DDC's in the period since the Iowa DDC began operation. A review of this research shows that studies were made that indicate that those DDC's with formats similar to Iowa's are not as effective as other types of programs. For example, studies carried out on several alternative DDC's in Phoenix, including the original Phoenix DDC on which the Iowa program was based, showed that the original Phoenix DDC was not as effective as other alternatives. As a result of this study, the Phoenix drinking-driving program has been revamped.

The information provided by these studies leads this researcher to conclude that there may exist alternative DDC programs that would more successfully solve the needs of Iowans than the existing one. Because of this, it is recommended that appropriate members of the DPI or DPS staff review the alternative DDC programs and the evaluative research on DDC programs and if necessary, suggest changes to be made in the Iowa program.

Summary and recommendations

Input It is recommended that:

1. DPI consider updating the course outline.
2. DPI consider providing alternative scheduling of classes, especially for daytime classes.
3. DPI, DPS, the Supreme Court Traffic Court Administrator, and legislators consider some means, including legislation or improved communications with judges, of providing for more uniform sentencing of offenders to the DDS.
4. DPI and DPS consider alternative courses or treatment for problem drinkers, including the Sioux City Behavior Modification Schools.

Process It is recommended that:

1. DPI consider updating all materials recommended in the curriculum guide, especially movies, pamphlets and references.
2. DPI review the contents of all recommended curriculum materials and consider alternatives, especially those suggested by teachers and coordinators.
3. DPI review the recommended data forms for relevancy and more clearly explain their purposes to the teachers and coordinators.

4. DPI review the contents and format of the curriculum guide, keeping in mind the alternatives used by teachers, especially the increased use of discussion and workshop groups and the alternatives used in programs in other states.

Course effectiveness

It is recommended that:

1. DPS or DPI provide that future recidivism studies include random assignment of offenders to the classes within the study or identification of problem and social drinkers, at least by number of prior arrests and BAC level at time of arrest.
2. DOT provides that BAC levels at the time of arrest for OMVUI offenders be coded into the TRACIS file for each offender.
3. Further study be carried out to explain the pattern of recidivism frequencies for persons convicted of OMVUI.
4. DPS and the Supreme Court Traffic Court Administrator develop a policy for treatment of repeated recidivists and toward repeated DDC class attenders and communicate it to the appropriate judges.
5. DOT provides that an edit be made to eliminate and correct invalid codes within the traffic records

section of the TRACIS system.

6. DPI or DPS provide that in future attitude change studies, identification be made of problem and social drinkers, at least by number of prior arrests and BAC levels.
7. DPI and DPS provide guidelines and training to teachers for identification and referral of the problem drinkers in their class, and in doing so, review the identification and referral procedures used in the Sioux City-Woodbury County ASAP program.
8. DPI, DPS, and the Supreme Court Traffic Court Administrator provide a stronger liason among teachers, coordinators, and judges, and encourage teacher-judge contacts.
9. Teachers invite judges to attend the DDC.
10. DPS review procedures for obtaining driving permits and for being admitted to the DDC, and provide clearer explanations to judges, teachers, and coordinators.
11. DPI provide in-service training for teachers and coordinators on a local and/or state level, and include in this training discussions with law enforcement personnel and other teachers and information on DDC materials.

Overall

It is recommended that:

1. Legislators consider placing final authority for the DDC program in a single body that includes representatives of the DPI and DPS and other interested groups, similar to the original advisory committee.
2. Appropriate members of the DPI or DPS staff review the alternative DDC program and evaluative research on DDC programs and, if necessary, suggest changes to be made in the Iowa program.

CHAPTER V. CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study has been to develop and test an evaluation model for state mandated educational rehabilitation programs taught in the community colleges. In the preceding chapters the model was developed and tested on the Iowa DDC program. Results of the test and conclusions and recommendations about the DDC program have been provided.

It is the purpose of this chapter to make conclusions and recommendations about the model itself. These conclusions and recommendations are based on a review and an external evaluation of the model. While a review of the pertinent literature provides little information about procedures for evaluating an evaluation model beyond testing it on a specific program (77, p. 299), it would appear that such an evaluation should ask the following questions.

1. Does the model provide information? (Does the model work?)
2. Is the model practical? (Is use of the model feasible and is the model effective in providing adequate information?)
3. Is the model logical? (Is it based on sound reasoning? Is it internally consistent?)

These questions will be used in providing conclusions and

recommendations of this study. In so far as is possible, the questions will be asked of persons other than this researcher.

Provision of Information

The first question can easily be answered. It is possible to conclude that the model does work and does provide information, evidence for this being the material provided in the previous chapter.

Practicality of Model

The second question about practicality of the model includes specific questions about feasibility and effectiveness. Because feasibility refers to the way in which the model fits the resources available to those persons intended to carry out the model, the following specific questions should be asked about feasibility:

1. Money: Are the financial demands of the model, including funds for salaries, computer time, printing, postage and travel, equal to the financial resources of the user?

2. Model completion time: Is the length of time needed to complete the model reasonable? Will the results be relevant and up-to-date once completed?

3. Staff time: Do the members of the staff have time

to implement the model? Will it make unreasonable demands on their time?

4. Availability of information: Does the needed information exist? Do staff members have access to it?

5. Staff expertise: Do staff members have the expertise, or access to the expertise, by which data can be gathered and analyzed?

Because effectiveness refers to the way in which the model provides accurate, complete and relevant information to groups requesting the evaluation the following questions can be asked about effectiveness:

1. Was information regarding inputs to the course in the categories of compliance, feedback, and local variations accurate, complete, and relevant?

2. Was information regarding process within the course in the categories of compliance, feedback, and local variations accurate, complete, and relevant?

3. Was information regarding products from the course in the categories of compliance, feedback, and local variations accurate, complete, and relevant?

Answers to these questions were obtained by interviewing those persons most likely to use the model in the future or most likely to request the information provided by the model. Persons interviewed in regard to feasibility

of the model were John Hartwig and Tom Grimm, consultants for the Adult Education Division of DPI; and Charles Moench, Director of the Area Schools Division of DPI. Persons interviewed in regard to the effectiveness of the model were John Hartwig and Tom Grimm, consultant for the Adult Education Division of DPI; Charles Moench, Director of Area Schools for DPI; Representative Joan Lipsky, member of the Iowa General Assembly; Jerry Beatty, Supreme Court Traffic Court Administrator; and Colonel Howard Miller, Director of the Governor's Highway Safety Action Program. Copies of the feasibility and the effectiveness interviews are found in Appendix G. The responses to the interviews were as follows:

Feasibility

Costs Representatives of the Adult Education Division stated that the greatest difficulty with using the operating model would be the lack of funds with which to carry out any part of it.[1] They responded, however, that

[1]Representative Joan Lipsky suggested that comments about funding by the Adult Education Division may reflect their concern about the original DDC legislation as well as their cost concerns. She pointed out that the DDC legislation provided that the DPI be responsible for developing the curriculum and administering the DDC program, but did not provide the DPI final authority over it, the final authority for curriculum and other changes being given to the DPS. Representative Lipsky suggested that this arrangement was intended to ensure communications between the two departments, but in fact may also have resulted in an unwillingness on the part of the DPI to take on new responsibilities in regard to the DDC, such as a comprehensive evaluation.

if these funds were provided by an appropriation from the state or some other source, then the model would be feasible. The representative of the area schools did not express concern about funds.

Completion time Neither group seemed concerned about the time required to complete the model.

Availability of staff time Neither group seemed concerned about the availability of staff time to carry out the model.

Access to information Neither group seemed concerned about actually obtaining the necessary information. However, the area school representative did point out that because of the small number of students in some of the area school DDC classes, the value of using the model in individual schools might be limited. It would seem to this researcher that this problem would not necessarily apply to the attitude or student follow-up surveys. However, it would apply to the recidivism study, which can only yield useful results when using the large amounts of data available on a regional or state level, or in a large metropolitan area.

It would also seem to this researcher that both groups would have difficulty obtaining recidivism information unless the TRACIS staff is able to retrieve the recidivism

data for them from the TRACIS files, which time and programming constraints prevent them from doing at the present. (Data for this study was retrieved by the Iowa State Statistical Laboratory.)

Expertise Neither group seemed concerned about being able to provide the expertise necessary to administer the model and analyze the results of it. It would seem to this researcher, however, that these responses again assume that either the TRACIS staff will retrieve the recidivism data or that the state will provide money to hire staff to do this.

Discussion This researcher concludes that the representatives of the Adult Education Division find the model feasible under the condition that funds are available to carry it out and that the representative of the areas schools finds it feasible under the condition that an appropriately large population is provided for the evaluation. It is the view of this researcher that the model is feasible under the condition that recidivism data is retrieved by the TRACIS staff or within the state government system. It is recommended that persons using the model in the future consider these conditions.

Effectiveness

Inputs Representatives of most groups responded that the model provided the necessary information on inputs. However, the Traffic Court Administrator suggested that the names of the three areas (inputs, process and products) might be more clearly understood by readers if expressed in a way that more directly reflected the information within each area. Because of this, when information was provided to users, the names of the areas were changed as follows: organization and operations (inputs), classroom methods (process), and course effectiveness (products).

It was also suggested by the Traffic Court Administrator that information on the procedures used by area school coordinators to admit OMVUI offenders to the course might be of interest and would belong in the section on inputs. The Traffic Court Administrator pointed out that not all admitting procedures used by coordinators are uniform, and that some coordinators feel that responsibility for these procedures belong more properly to law enforcement personnel, both situations tending to decrease the effectiveness of the course.

Process All groups responded that the information provided in the process section was adequate.

Products Most groups responded that the information provided in the products section was adequate. It was suggested by the Traffic Court Administrator that information on percentage of dropouts and on the court follow-ups of dropouts would have been of interest, and would belong in the section on products. It was also felt by this researcher than information from teachers and coordinators about unintended effects of the class, such as attendance by DDC students in area school classes other than the DDC would have been of interest.

In addition it was felt by this researcher that the recidivism information would have been more conclusive if problem and social drinkers could have been identified and segregated for purposes of analysis, and if more information on the individual differences between members of class and no-class groups had been available. Unfortunately little of this information is now available in Iowa on a statewide basis.

Discussion It appears that for the most part all groups felt that the model provided adequate information, though some felt that additional information could have been provided. This additional information included information from coordinators about class admitting procedures, and about unintended effects of the class. One of the groups also

felt that the information headings should be changed to more clearly reflect the specific information provided in the study. In addition it was felt by this researcher that the recidivism section of the study would have been more effective if it had included information about the drinking-driving characteristics of individual offenders. It is recommended that persons using the model consider making these additions and changes.

Logical Basis for Model

The third question on the logical basis of the model is more difficult to answer than the second question on practicality. This is because there are few external evaluation procedures available for establishing the logical basis of a model.

Even though it has been established that the model provides information and is feasible and effective, the logic of the model is not ensured. The model used in this study has been developed by combining elements from at least two types of evaluation systems. As stated earlier, these systems include the legislative program and compliance adult, and the educational follow-up and feedback evaluation. In addition the model includes research procedures that range from formal pretest-posttest experimental designs to one-shot open-ended survey questionnaires. An internal analysis of the

combination leads this researcher to conclude that the only obvious difficulty with the combination comes in attempting to organize and present the material for use by state agencies, it being necessary to explain the differences in purpose and precision of the various kinds of data provided and to organize the data accordingly.

Because of this conclusion, it is recommended that future evaluators using this or a similar model consider presenting the data in two parts, one on feedback or follow-up information, and one on product or outcome information, rather than in one part as provided in this study.

However, in addition to this internal analysis, an external analysis is necessary to point out consequences of this model other than suggested, or conceptual difficulties and inconsistencies that might appear when the model is used on other circumstances. Persons evaluating the practicality of the model were asked to comment on the logic of the model, but no comments were received. Other than requesting an external review of the model by an individual such as Michael Scriven, an expert in the logical analysis of evaluation models, there does not appear to be any procedure for this kind of analysis. It is concluded that review by an expert such as Scriven is not a practical or possible procedure to use, the review process being a time consuming one and there being few available experts. It is recommended

that further study be carried out on developing practical procedures for the external logical and conceptual analysis of evaluation models.

Additional Findings

In reviewing the entire study, it appears that there are two additional points about which conclusions and recommendations can be made.

One point relates to the way in which authority for the DDC rests in two departments, the DPI and DPS, the former responsible for guidance and oversight, and apparently more involved in the course, the latter less involved, but invested with final authority over changes. Whether this division of responsibiltiy causes real difficulties in carrying out a program evaluation of the DDC is uncertain. What does seem to be certain, however, is that any evaluator attempting to use this model must be aware of the possibility of tensions between the state agencies involved in the program as appears to be the situation in this case, or between other political entities such as the legislature and the executive branch of which state agencies are a part. It is the conclusion of this researcher that evaluators must be aware of these tensions, since they may limit the effectiveness of the model. It is recommended that evaluators using the model in

the future make some attempt to discover the existence of these tensions and build some provision for them into the "context and background" area, or other areas of the operational model.

A second point to be made is about the state computer system. It would appear that almost all persons using this model will use data stored in the state traffic records computer files. While it seems likely that most state computer files are well organized and run, it should be pointed out that the system may not be organized for easy use by an evaluator. In some cases, access to certain data may be limited, certain kinds of data may not be available, or available data, while accurate and consistent enough for the purposes of most users, may be too inaccurate or inconsistent for the evaluator. It is concluded by this evaluator that the above difficulties may exist for anyone using this model in Iowa or any other state. It is recommended that evaluators using this model review the access to and accuracy and consistency of the computer records that they wish to use, and build into the operational model provisions to accommodate limited access, accuracy and consistency.

Summary of Recommendations

Practicality of the model

Feasibility In order to ensure the feasibility of the model it is recommended that:

1. Funds are available for carrying out the model.
2. The population on which the evaluation is carried out is large enough to provide useable results.
3. Recidivism data from the traffic records files are available within the state government system and can be retrieved by some state government agency.

Effectiveness In order to ensure the feasibility of the model it is recommended that:

1. The names of the areas of information gathered be changed to reflect the specific purposes of the evaluation.
2. Additional information be requested concerning DDC coordinators' procedures for entry into the class, and about unintended effects of the class.
3. Information about differences among individual offenders be provided for use in the recidivism study.

Logical basis for the model

It is recommended that:

1. Presentation of data from evaluation models similar to this one be presented in two parts, one on feedback or follow-up information, and one on outcome or product information.
2. Further study be carried out on developing practical procedures for the external logical and conceptual analysis of evaluation models.

Additional findings

It is recommended that evaluators using this model in the future:

1. Discover the existence of tensions among state agencies or between political entities such as the legislature and executive branch, and provide for these tensions in the operational model.
2. Review the access to and accuracy and consistency of the computer records to be used in the evaluation, and provide for limited access accuracy and consistency in the model.

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APPENDIX A: DRINKING DRIVERS' COURSE STATUTE

OMVUI VIOLATIONS - INSTRUCTION COURSE:

321.283 Court order for instruction to drinking drivers.

1. Definitions. As used in this division, unless the context otherwise requires:

a. "Course for drinking drivers" means an approved course designed to inform the offender about drinking and driving and encourage the offender to assess his own drinking and driving behavior in order to select practical alternatives.

b. "Satisfactory completion of a course" means receiving at the completion of a course a grade from the course instructor of "C" or "2.0" or better.

c. "Drivers license" means a license to drive a motor vehicle as an operator or chauffeur.

2. Court order. After the conviction of a person for operating a motor vehicle while under the influence of an alcoholic beverage, the court in addition to its power to commit the defendant for treatment of alcoholism under section 321.281, may in lieu of, or prior to or after the imposition of punishment for a first offense or prior to or after the imposition of punishment for any subsequent offense, order the defendant, at his own expense, to enroll, attend and successfully complete a course for drinking drivers. A copy of the order shall be forwarded to the department.

3. Referred on conviction. After any conviction for operating a motor vehicle while under the influence of an alcoholic beverage under section 321.281, the court may refer the defendant for treatment at a facility as defined in sections 125.1 to 125.26. The court may prescribe the length of time for treatment or it may be left to the discretion of the facility to which the defendant was referred. A person referred under this section shall be considered a state patient, and charges and costs for treatment shall be paid for in the manner provided for payment for treatment of alcoholics who have no legal residence in this state.

4. License revoked. When the court orders a person to enroll, attend and successfully complete a course for drinking drivers, the court shall also order that the revocation of the person's drivers license shall be for an indefinite period and until the required course is successfully completed and proof of completion has been filed with the department and the provisions of chapter 321A have been complied with.

5. Training course not available. No person shall have his drivers license revoked indefinitely under this division for failure to enroll in a course where the required course is not taught within a radius of one hundred miles from his usual residence.

6. Temporary permit. Any person required to attend a

course by the provisions of this division, who is subject to a drivers license suspension or revocation, may be issued a temporary driving permit by the department restricted to driving to and from his home, place of employment, in his employment and the location of the required course. Any person who does not receive a temporary driving permit may after the period of license suspension or revocation under section 321.281 have his drivers license reissued subject to suspension for failure to comply with the provisions of this division. This section shall not permit the issuance of a temporary driving permit or reissuance of a drivers license where the provisions of chapter 321A have not been complied with.

Successful completion of a course required by this division shall not reverse a drivers license suspension or revocation or reduce the length of a suspension or revocation under section 321.281; however, the director may reduce the length of a suspension or revocation contingent upon successful completion of a course for drinking drivers.

7. Course offered at area schools. The course-provided in this division shall be offered on a regular basis at each area school as defined in section 280A.2.

Enrollment in the courses shall not be limited to persons ordered to enroll, attend and successfully complete the

course under the provisions of subsection 2, and any person convicted of operating a motor vehicle while under the influence of an alcoholic beverage who was not ordered to enroll, shall be allowed to enroll and attend a course for drinking drivers.

The course required by this division shall be taught by the area schools under the department of public instruction and approved by the department.

The department of public instruction shall establish reasonable fees to defray the expense of obtaining classroom space, instructor salaries, and class materials. No person shall be denied enrollment in a course by reason of his indigency.

8. No discharge from employment. No employer shall discharge a person from his employment solely for the reason of work absence to attend a course required by this division. Any employer who violates this section shall be liable for triple damages occasioned by the unlawful discharge from employment.

9. Course available within one year. The course required by this division shall, within the limit of available funds and instructors, be open for enrollment not later than one year after July 1, 1972.

10. Hearing after revocation. Upon written request

the department shall afford a person having his drivers license revoked indefinitely under the provisions of this division an opportunity for a hearing before the director, within twenty days after receipt of the request and in the county where the licensee resides unless another county is mutually agreed upon. Following the hearing the revocation may be rescinded if the director determines the revocation is not authorized by this division.

11. List of places and dates where course available. The department of public instruction shall prepare a list of the locations of the courses taught under this division, the dates and times taught, the procedure for enrollment, and the schedule of course fees. The list shall be kept current and a copy of the list shall be sent to each court having jurisdiction over offenses provided in chapter 321.

12. Data preserved. The department of public instruction shall maintain enrollment, attendance, successful and nonsuccessful completion data on the persons ordered to enroll, attend and successfully complete a course for drinking drivers. This data shall be regularly forwarded to the department.

13. Fee for temporary permit. The fee for a temporary driving permit under subsection 6 shall be three dollars. The temporary driving permit must be in the permittee's

immediate possession while operating a motor vehicle and shall be invalid when the permittee is issued a drivers license. The temporary driving permit shall be canceled upon conviction for a moving traffic violation.

14. Penalty. Any person violating a restriction or a temporary driving permit issued under subsection 6 shall be guilty of a misdemeanor.

APPENDIX B: JUDGES' QUESTIONNAIRE AND COVER LETTER

IOWA DEPARTMENT OF

PUBLIC SAFETY

Robert D. Ray
GOVERNOR

Charles W. Larson
COMMISSIONER

April 2, 1976

Dear Sir,

The attached questionnaire is part of a joint study that the State Departments of Public Safety and Public Instruction are undertaking in order to learn the effectiveness of the Iowa drinking drivers course, the course presently taught at the community colleges for persons convicted of OMVUI.

One essential part of this study is to gather information on the attitudes of judges toward the classes and the extent to which judges make referrals to them. This information will be added to information gathered on recidivism rates of students having taken the course and changes in student attitudes and knowledge about drinking while driving, to provide an overall picture of the course. This, in turn, will be used by the Departments of Public Safety and Public Instruction to determine the effectiveness of the Iowa drinking drivers classes.

The questionnaire is brief, but your response to it is very important. Your responses will be tabulated along with those of other judges. All the information that you furnish will be treated confidentially. Please return the questionnaire by April 9.

Thank you for your time.

Sincerely,

Linda Tigges

Linda Tigges
Project Analyst

DRINKING DRIVING CLASS

Questionnaire for Judges

Community College Area_____

1. Do you presently hear OMVUI cases in your court?

   Yes ☐ ⟶ Continue to question 2

   No ☐ ⟶ Please return questionnaire

2. For how long have you been hearing OMVUI cases?

   _____years

3. During the last year, approximately what percent of persons with first OMVUI convictions did you <u>not</u> refer to the community college Drinking Drivers Course? (check one)

   ___none
   ___1-5%
   ___5-10%
   ___10-20%
   ___20-30%
   ___30% or more

4. In what situations do you <u>not</u> refer a person convicted of OMVUI to the Drinking Drivers Course?

   _____

   _____

   _____

5. Is there any procedure in your court for identifying the problem drinkers from among persons convicted of OMVUI for the first time?

   Yes ☐ ⟶ Please outline the nature of this procedure:_____

   No ☐ _____

   _____

6. Is any rehabilitation program available in your area for problem drinkers, other than the Drinking Drivers Course?

   Yes ☐ ⟶ What kinds of rehabilitation are available?_____

   No ☐ _____

   _____

7. From what sources do you receive feedback about the Drinking Drivers Course?

_____

_____

_____

8. In general, how would you rate this feedback?

(please check one)
a. ___very complete
___somewhat complete
___not at all complete

(please check one)
b. ___appears to come from very reliable sources
___appears to come from somewhat reliable sources
___appears to come from unreliable sources

9. Have you ever attended any class sessions of a community college Drinking Drivers Course as an observer?

Yes ☐

No ☐

10. How effective do you feel that these classes are in discouraging class completers from drinking and driving? (please check one)

___very effective
___rather effective
___somewhat effective
___not very effective
___not at all effective

11. How do you think that most of the class completers view the class? (please check one)

___a "soft" penalty and an easy way out; not a deterrent in itself.
___a reasonable penalty and a deterrent from further drinking and driving.
___a deterrent from further drinking and driving, but an unreasonable penalty.

12. If you could choose, would you eliminate the Drinking Drivers Course and replace it with other penalties?

Yes ☐ ⟶ What kind of penalties would you like to see implemented instead of the course?_____

No ☐ _____

_____

13. Would you prefer to eliminate the class and keep the other penalties as they are without any additions?

Yes ☐

No ☐

14. Please list below any suggestions that you have for making changes in the Drinking Drivers Course:

_____

_____

_____

COMMENTS:

APPENDIX C: STUDENT PARTICIPANTS ATTITUDE QUESTIONNAIRE

DRINKING DRIVERS COURSE

Student Questionnaire

Part I

The following statements relate to drinking and driving. We are interested in seeing how you feel about different aspects of this subject. Read each statement carefully, and place a check in the appropriate space to the right of the statement. There are no "right" or "wrong" answers. We want to know how you feel. Be sure to respond to every statement. Choose only one answer for each statement.

	Agree	Disagree
1. If you have just one or two drinks you can drive just as well as without them.	___	___
2. The experienced driver is rarely bothered by a few drinks.	___	___
3. I would not feel safe riding with a driver who had consumed eight drinks.	___	___
4. It's all right to drive after drinking if the amount is kept reasonable.	___	___
5. There is little harm in a drink before driving.	___	___
6. Feelings of well-being induced by alcohol lead people to take chances on the highway.	___	___
7. There is nothing really wrong with driving after having only a few drinks.	___	___
8. The law should limit the amount of alcohol that is served to a person who drives to a bar.	___	___
9. I would feel safe riding with a driver who had recovered from alcoholism.	___	___
10. Doctors should be required to report drivers who are alcoholic to the Motor Vehicle Bureau.	___	___
11. Often the relaxing effect of a drink can improve driving.	___	___
12. No one should drink and then drive.	___	___
13. Just the right number of arrests are currently made for drunk driving.	___	___
14. Most books on the relation between alcohol and driving exaggerate the effects of alcohol.	___	___

		Agree	Disagree
15.	You have to be crazy to ride with a driver who has had a few drinks.	___	___
16.	You can't blame a man for having a few drinks on the way home after a hard day's work.	___	___
17.	Only people who hold their liquor well should drive after drinking.	___	___
18.	If you are tired before driving, a drink may help.	___	___
19.	Driving after drinking is a very dangerous practice.	___	___
20.	Some people can handle emergencies better while driving after a few drinks.	___	___
21.	Some persons can drink and then drive safety.	___	___
22.	Some people drive just as well after ten drinks as they would had they not consumed alcohol.	___	___
23.	It's okay to drive after a few drinks but it's not okay to drive after many drinks.	___	___
24.	Persons who frequently drink and drive are emotionally ill.	___	___
25.	It is a good idea to take a drink before driving if you are tense.	___	___
26.	A person convicted of driving while intoxicated should have his license revoked.	___	___
27.	Tests to determine the alcoholic content of the body should be required of suspected drinking drivers.	___	___
28.	After four drinks, some people drive worse, but some people can drive just as well as without them.	___	___
29.	In a drinking society, alcohol education for drivers is as important as driver education.	___	___
30.	A little alcohol may reduce tensions and thereby improve driving.	___	___
31.	Not enough arrests are currently made for driving while intoxicated.	___	___
32.	Arrest for driving under the influence of alcohol should carry a stiff fine.	___	___
33.	Most people are more cautious behind the wheel after drinking.	___	___
34.	Hosts and hostesses should limit the amount of alcoholic beverages served to driving guests.	___	___
35.	Anyone with a history of alcoholism should lose the privilege of obtaining a drivers license.	___	___

	Agree	Disagree
36. Persons convicted of drunken driving should be given a jail sentence.	___	___
37. My reflexes are better after a few drinks because I'm more alert.	___	___
38. Persons apprehended for driving while intoxicated should be required to attend a class on alcohol and driving.	___	___

****

The following questions are about your drinking-driving behavior during the six months before your arrest. Answer each one as completely as you can.

1. How many drinks in a two-hour period did you think you would have to drinks to reach the level where you would be considered legally drunk?

   _____drinks

   Since this is based on weight, please indicate your approximate weight during the six months before your arrest:

   ___less than 100 lbs.
   ___100-119 lbs.
   ___120-139 lbs.
   ___140-159 lbs.
   ___160-179 lbs.
   ___180-199 lbs.
   ___200-219 lbs.
   ___220-239 lbs.
   ___240 and over

2. During the six months before your arrest, when you had been drinking heavily and knew that you could not drive, what alternatives did you use rather than driving yourself?

   a._____

   _____

   b._____

   _____

   c._____

   _____

   d._____

   _____

3. During that six-month period, about how many times did you use each alternative listed above?

   a. First alternative listed: used_____times
   b. Second alternative listed: used_____times
   c. Third alternative listed: used_____times
   d. Fourth alternative listed: used_____times

4. During that six-month period, about how many times were you drinking heavily, but went ahead and drove?

   _____times (If your answer is none, go to question 6)

5. In those instances where you went ahead and drove anyway, what were the reasons that you did not use some alternative rather than driving yourself?

_____

_____

_____

6. In the six months before your arrest, when you were with friends who had been drinking heavily, how many times did you insist they use some alternative rather than driving?

_____times

How many times did you not persuade them to try an alternative?

_____times

7. In the six months before your arrest, what was the greatest number of drinks that you drank on one occasion and then went ahead and drove? (check one)

___one drink
___two drinks
___three drinks
___four drinks
___five drinks
___six drinks
___seven drinks
___eight drinks
___nine drinks
___ten or more drinks
___don't know

APPENDIX D: STUDENT COMPLETERS QUESTIONNAIRE

PUBLIC SAFETY

Dear Class Participant,

The attached questionnaire is part of a follow-up survay the Department of Public Safety and the Department of Public Instruction are undertaking in order to understand better one of the most important aspects of the Drinking Drivers Class -- its effect on participants.

Your response to the attached questionnaire will be tabulated along with those of other class members, to provide a general picture of attitudes toward the course and its effect on participants. This information in turn will be used to analyze the total effectiveness of the course and to improve it for other students.

Your name was chosen at random from a list of all class participants.

The questionnaire is brief, but your response is very important. Please fill out the questionnaire as thoroughly and completely as possible and return it within five (5) days. All the information you furnish will be treated confidentially.

Thank you for your time.

LINDA TIGGES, PROJECT ANALYST

DETACH BEFORE MAILING

DRINKING DRIVERS COURSE

CLASS COMPLETERS QUESTIONNAIRE

A. The following questions relate to your feelings about the usefulness of the class.

1. Would you have preferred to pay a fine, or an additional fine, or receive some other penalty instead of attending the class?

   Yes ☐ ➧ What was it you disliked about the class that made you prefer another penalty?

   No ☐

2. Do you have any suggestions for improving the class to make it more effective?

   Yes ☐ ➧ Please state your suggestions below:

   No ☐

3. Not considering changes brought about by other penalties such as a fine or increased insurance rates, do you think that just class attendance resulted in any change in the drinking-driving behavior of yourself and others who attended the class?

   Yes ☐ ➧ Please indicate how much change you think was brought about:

   No ☐

   (check one)

   ____ a lot
   ____ some
   ____ hardly any

4. Please list the changes in the drinking-driving behavior for you or for others who attended the class that you are quite certain were brought about by class attendence alone:

B. The following questions relate to your feelings about the movies used in the class and the scheduling of the classes:

1. Was the amount of time spent on movies:

   (check one)

   ____ a lot
   ____ just right
   ____ too little

2. The information provided in the movies was:

   (check one)

   ____ not relevent to me
   ____ somewhat relevent to me
   ____ quite relevent to me

   (check one)

   ____ something I already knew
   ____ Partly new information; partly things I already knew
   ____ almost all new information

3. If you have comments you would like to make about the movies, please stete them below:

4. The class you attended followed a schedule of three hours a night, one night a week for four weeks, for a total of 12 hours. Was this acceptable to you?

   Yes ☐

   No ☐ ➧ Please indicate what kind of arrangement you would have preferred:

APPENDIX E: TEACHERS' AND COORDINATORS' QUESTIONNAIRE AND COVER LETTER

STATE OF IOWA • DEPARTMENT OF PUBLIC INSTRUCTION
GRIMES STATE OFFICE BUILDING • DES MOINES, IOWA 50319

Iowa
a place to grow

ROBERT D. BENTON, Ed.D., STATE SUPERINTENDENT
David H. Bechtel, M. S., Administrative Assistant
RICHARD N. SMITH, Ph.D., DEPUTY SUPERINTENDENT

May 25, 1976

Dear Teacher or Coordinator,

The enclosed questionnaire is part of a joint study that the State Departments of Public Instruction and Public Safety are undertaking in order to learn the effectiveness of the Drinking Driver's Course. One essential part of this study is to gather information on teacher and coordinator attitudes toward the course, and their recommendations for improving it.

This information will be added to information gathered on student outcomes and judges' attitudes to prvoide an overall picture of the course, which will in turn be used by the Departments of Public Instruction and Public Safety to make the Iowa Drinking Driver program one of the best possible.

The questionnaire is brief, but your response to it is very important. Your answers will be tabulated along with those of other teachers and coordinators. All the information you furnish will be treated confidentially. Please return the questionnaire within five (5) days.

Thank you for your time.

Sincerely,

Linda Tigges

Linda Tigges
Project Analyst

DRINKING DRIVING CLASS

Questionnaire for coordinators and teachers

NAME_____ ___teacher ___coordinator
(Please print) Last First Middle

AREA SCHOOL_____

1. How many quarters have you been teaching or coordinating the Drinking Drivers Course?_____quarters.

A. .The following questions are about the course curriculum and organization:

1. Students attend class three hours a night, once a week for four weeks, for a total of twelve hours. Do you feel this schedule could be improved?

   yes Please indicate in what way the schedule could be improved:

   no _____

   _____

   _____

2. All persons with first convictions of OMVUI are required to attend the Drinking Drivers Class, though some may be identified as problem drinkers and others as social drinkers. Do you think that the class would be more effective if only social drinkers were required to attend, and other provisions were made for problem drinkers?

   yes Please explain: _____

   _____

   no Please explain:_____

   _____

3. Several teaching aides are suggested for use by the Department of Public Instruction in the curriculum guide. Of these suggested aides, which do you use, and how would you rate those you do use?

   a. Class outlines:

      yes ___useful
      ___somewhat useful
      ___not very useful

      no

      Comments:_____

b. Pamphlets:
yes ___useful
___somewhat useful
___not very useful

no

Comments:_____

_____

c. Movies:
yes ___useful
___somewhat useful
___not very useful

no

Comments:_____

_____

d. References:

yes ___useful
___somewhat useful
___not very useful

no

Comments:_____

_____

e. Data forms for students:

yes ___useful
___somewhat useful
___not very useful

no

Comments:_____

_____

4. In what ways other than those you have stated above do you feel that course curriculum or organization could be improved?

_____

_____

_____

5. What changes in curriculum or organization have you made in your course that you feel could be of use to other instructors or coordinators?

_____

_____

_____

****

B. The following questions are about class effectiveness:

1. How effective do you feel that these classes are in keeping class completers from drinking and driving? (Please check one)

___very effective
___rather effective
___somewhat effective
___not very effective
___no at all effective

2. What observations or feedback has indicated to you that the class was or was not effective:

a. Was not effective:_____

_____

_____

b. Was effective:_____

_____

_____

3. What kinds of in-service training would you prefer to improve your effectiveness in teaching the Drinking Driver Course?

_____

_____

_____

REFERRAL QUESTIONNAIRE

Community College Area_____

1. Do you have a process for identifying the problem drinkers in your classes?

   yes ☐ ——→ Please explain what the process is:_____

   _____

   _____

   no ☐

2. What percentage of people in most ofyour classes do you feel are problem drinkers? (Check one)

   ___1 - 5%
   ___5 - 10%
   ___10 - 20%
   ___20 - 40%

3. Do you refer problem drinkers to rehabilitation agencies?

   yes ☐ ——→

   a. How many persons did you refer from your last class? ____persons.

   b. What average number of persons do you refer from most classes? ____persons

   c. To what agencies do you usually make referrals?

   _____

   _____

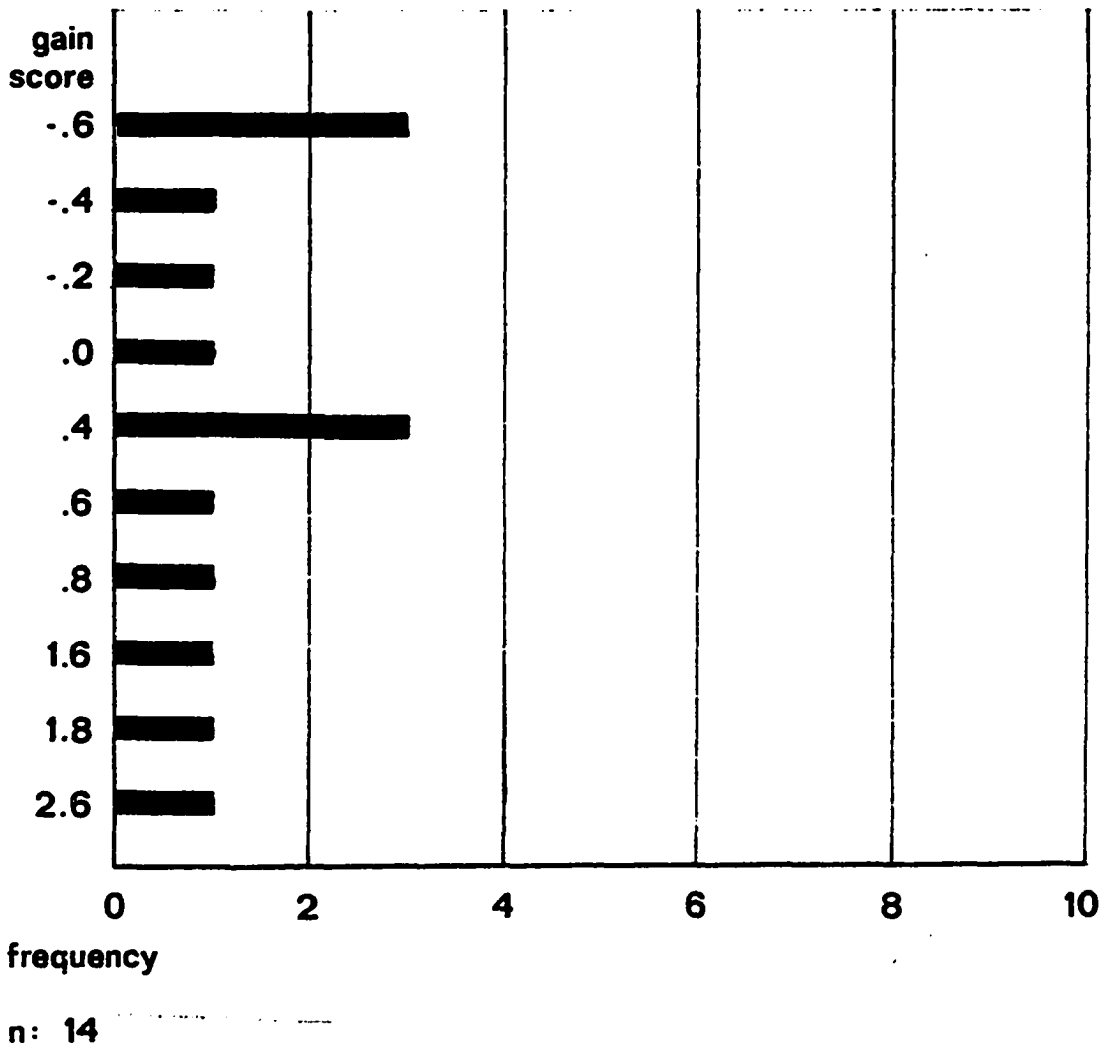
   no ☐

COMMENTS_____

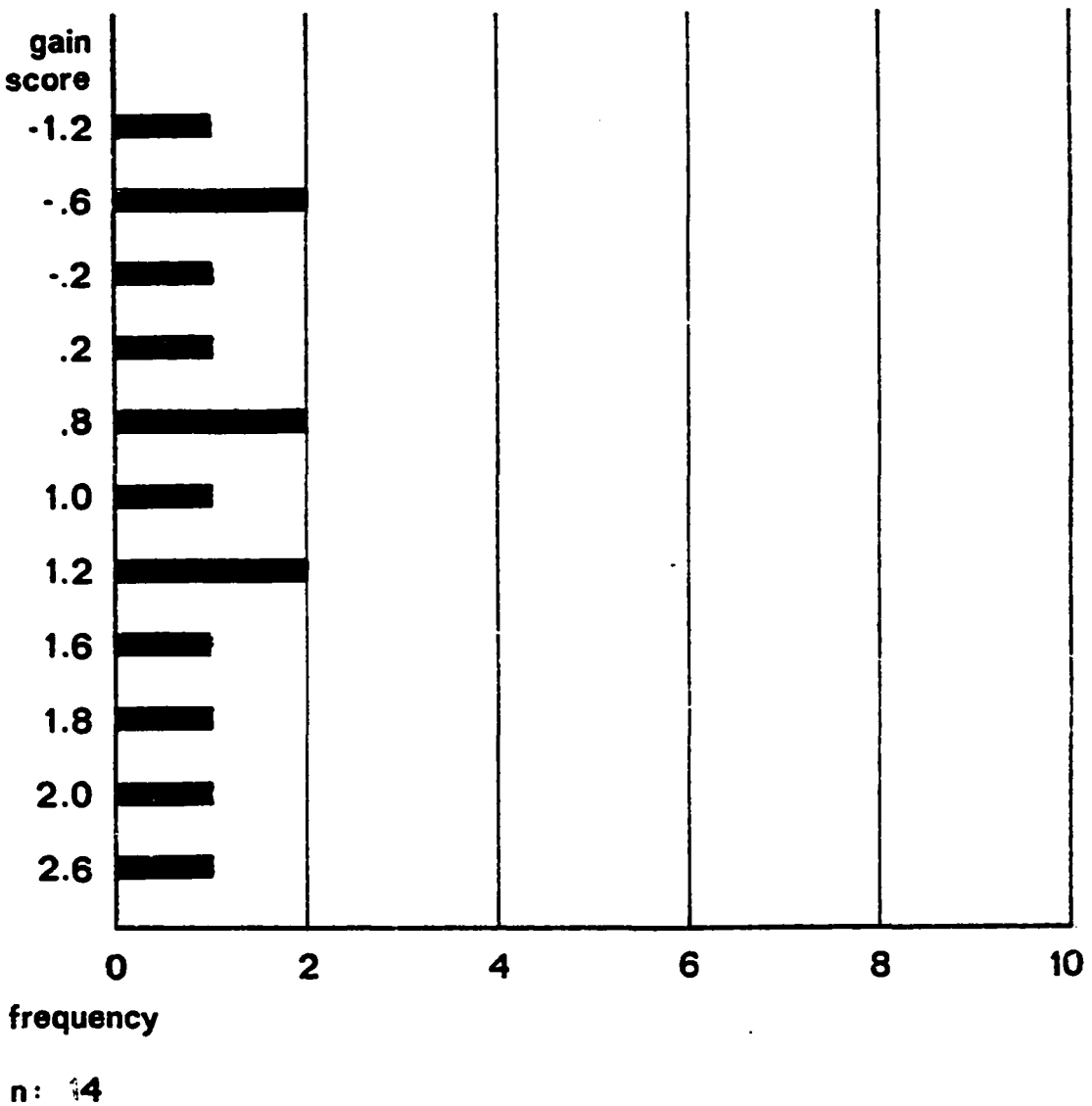
_____

_____

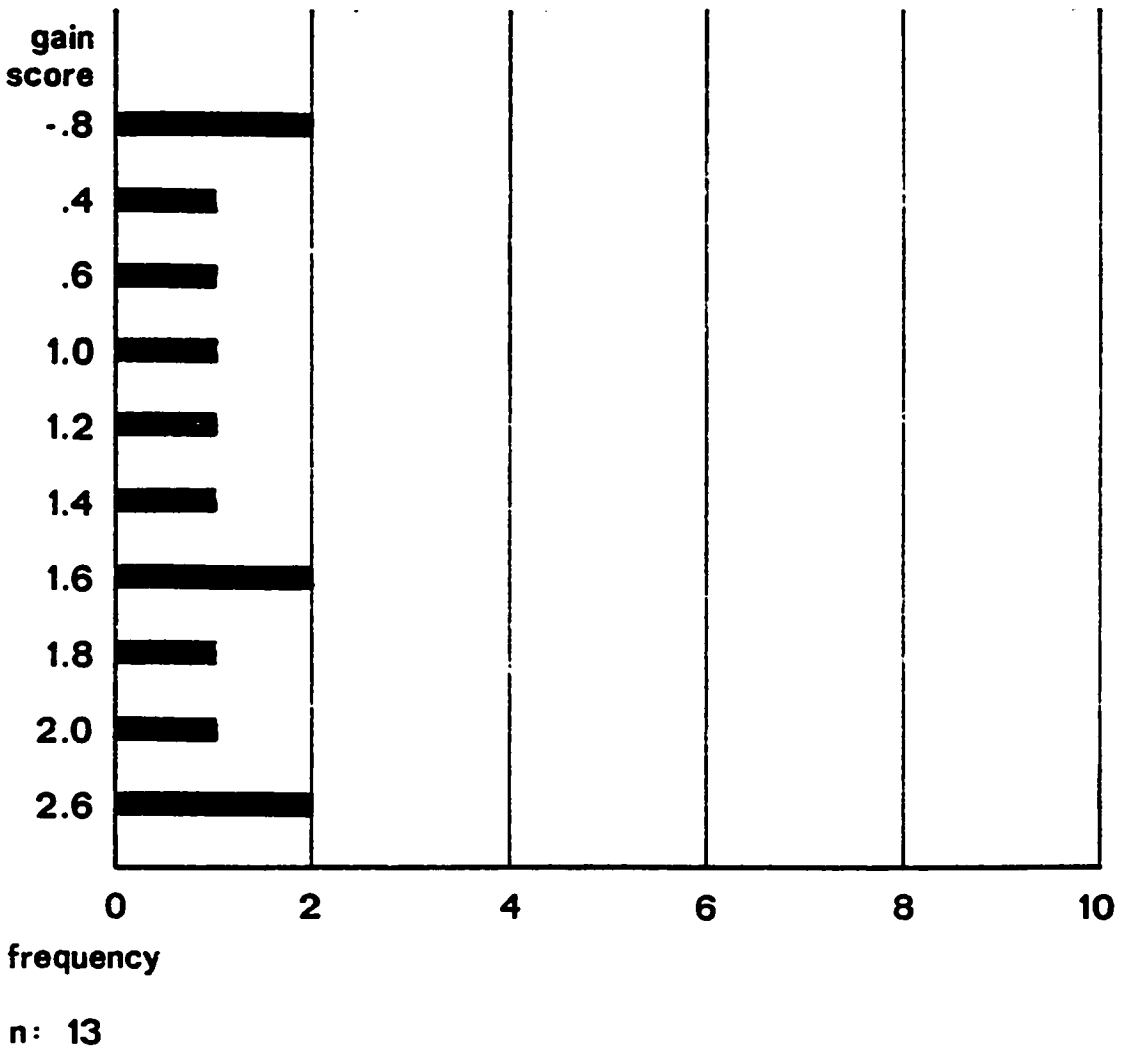
APPENDIX F: PARTICIPATING STUDENTS' ATTITUDE TEST: FREQUENCIES OF GAIN SCORES IN INDIVIDUAL CLASSES BY AREA SCHOOL



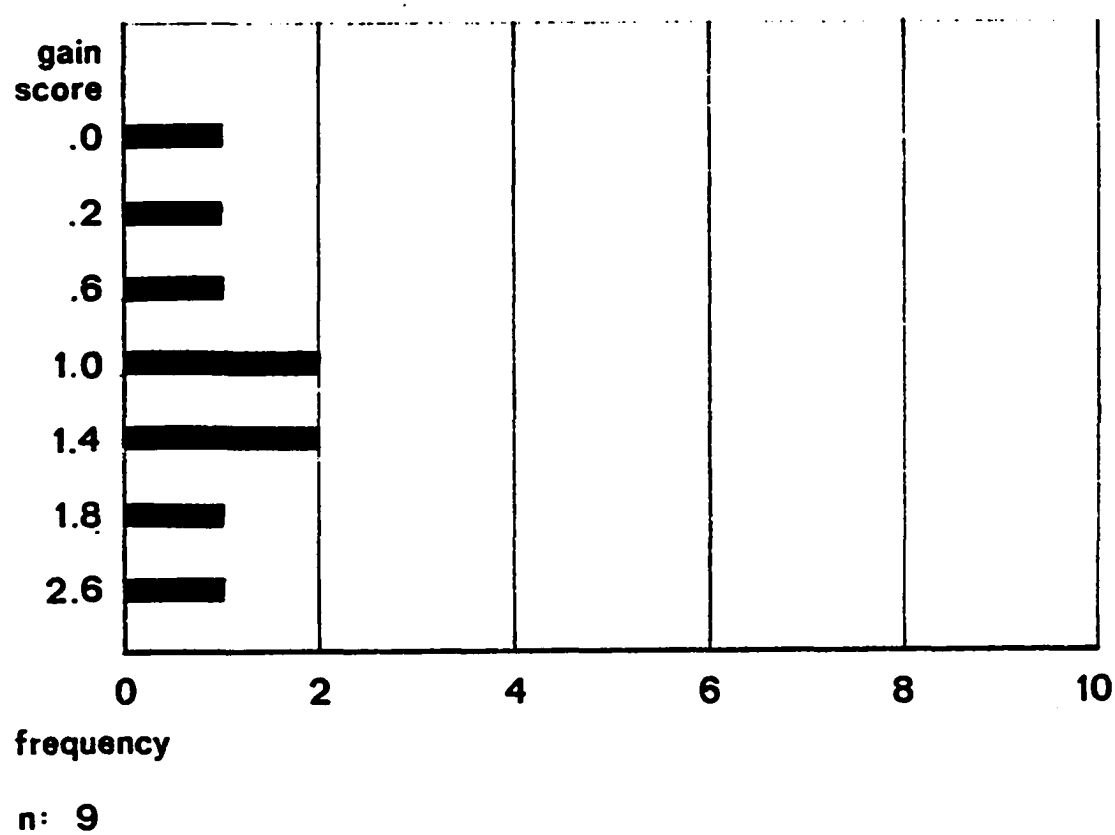
Graph 1. Attitude study gain score frequencies at Northeast Iowa Area Vocational-Technical School at Calmar (Area 1)



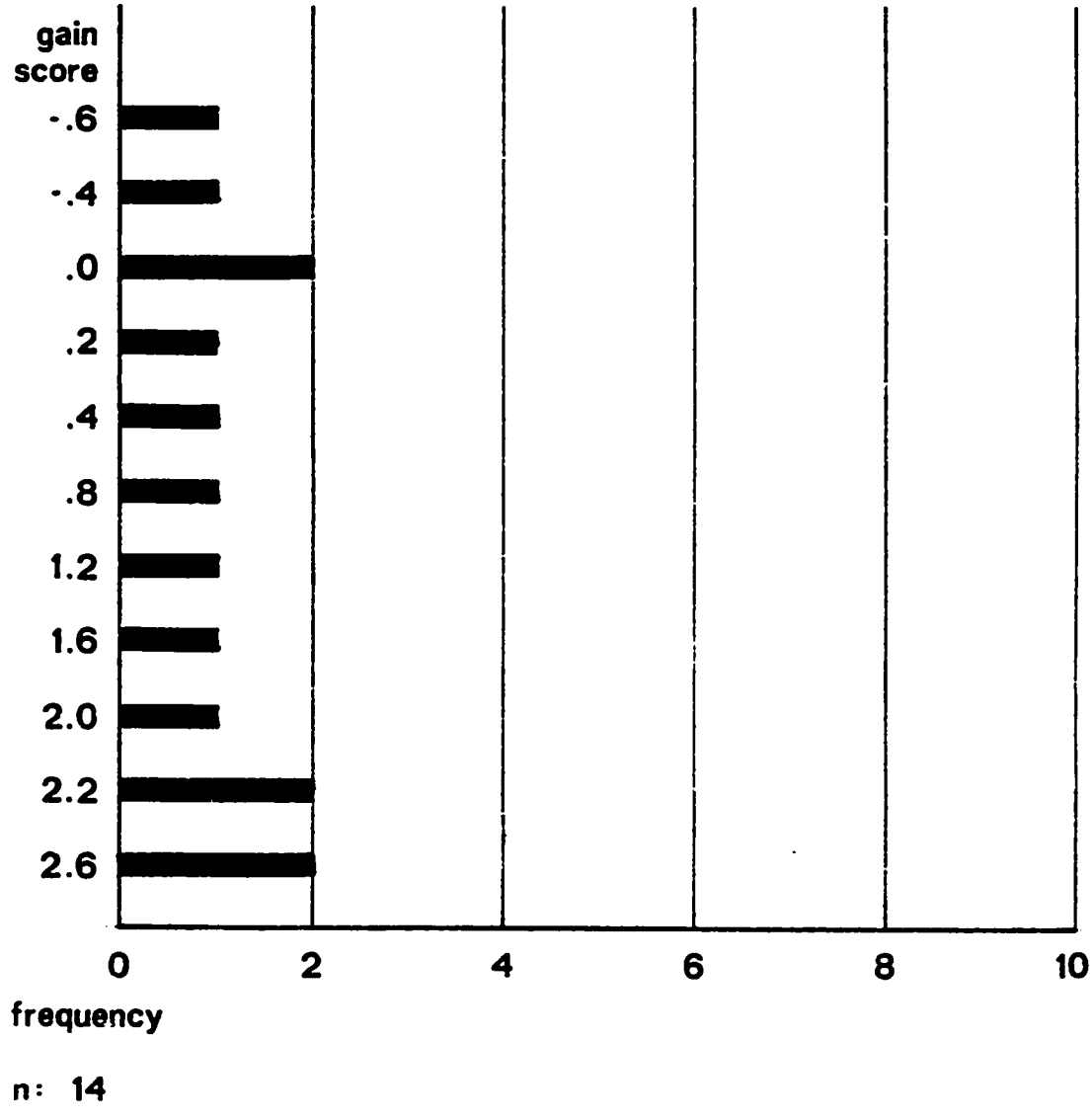
Graph 2. Attitude study gain score frequencies at Northeast Iowa Area Vocational-Technical School at Dubuque (Area 1)



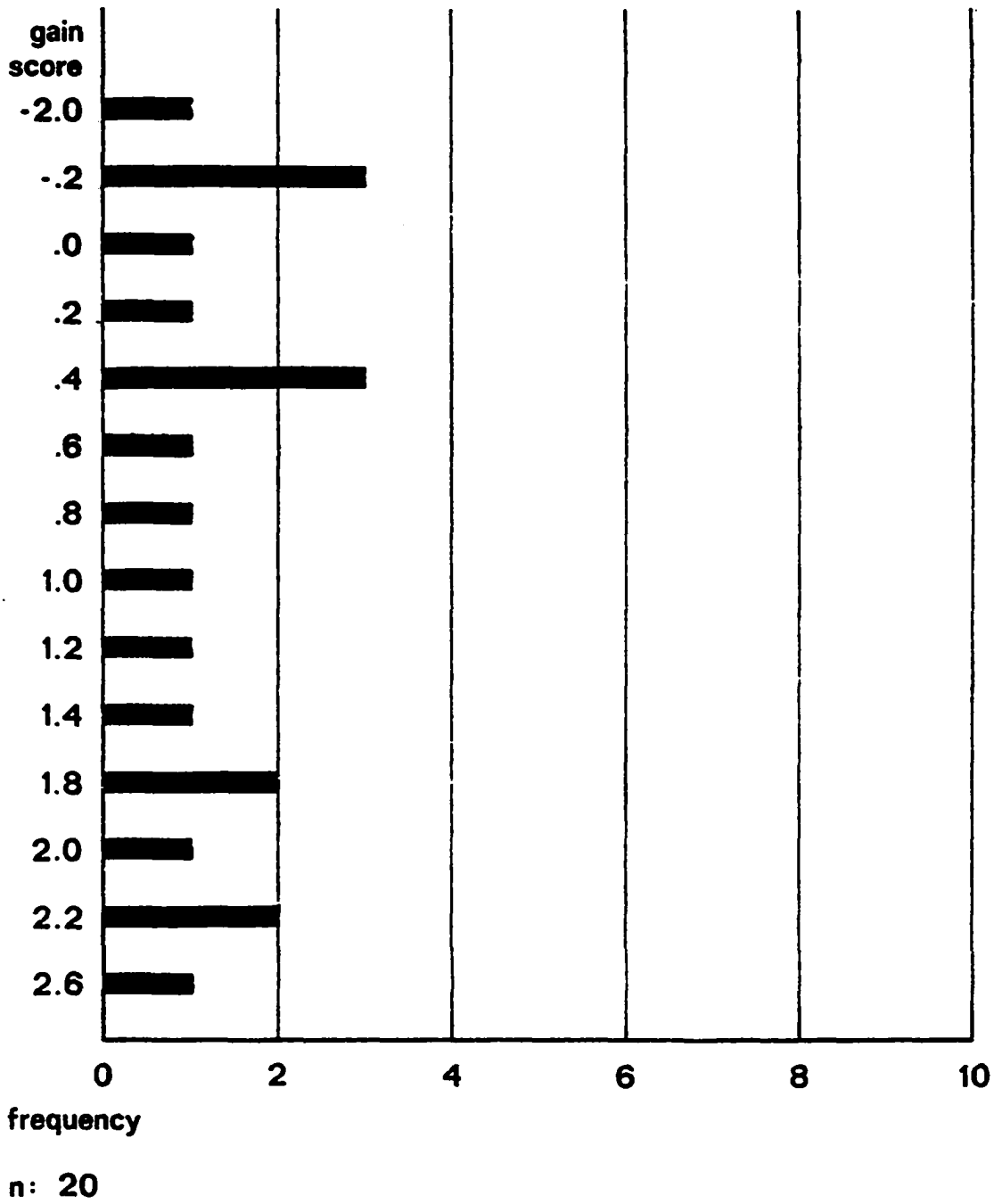
Graph 3. Attitude study gain score frequencies at Iowa Lakes Community College at Estherville (Area III)



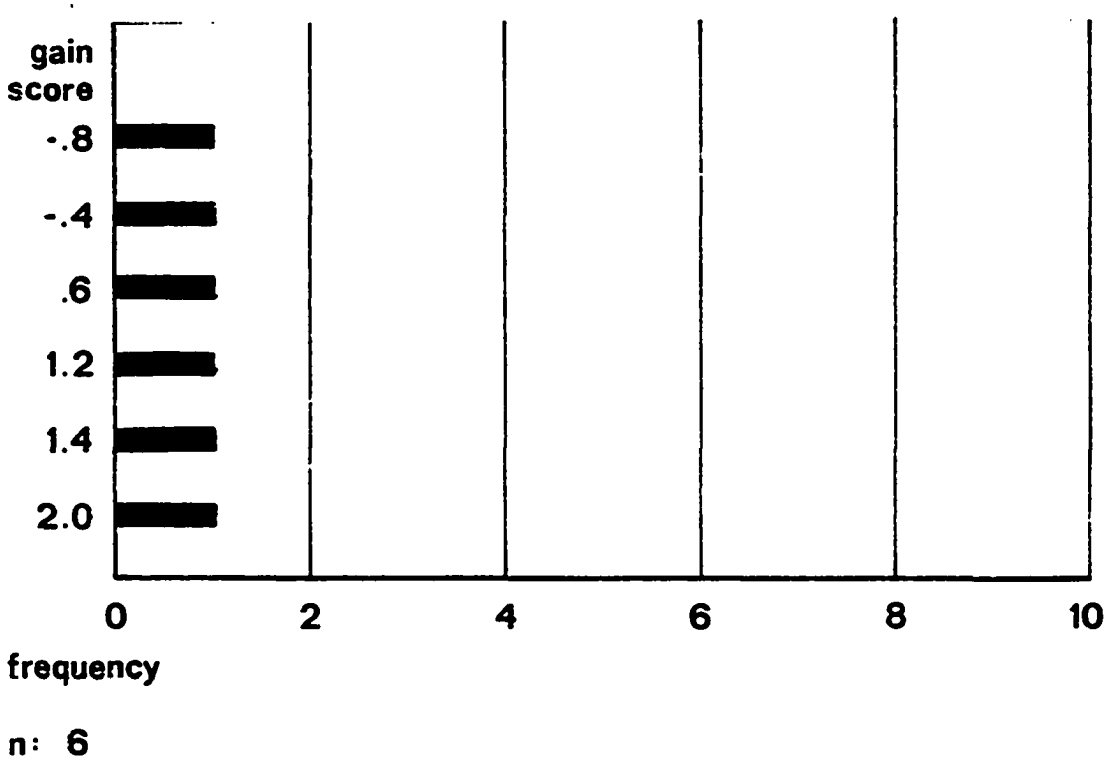
Graph 4. Attitude study gain score frequencies at Northwest Iowa Technical College at Sheldon (Area IV)



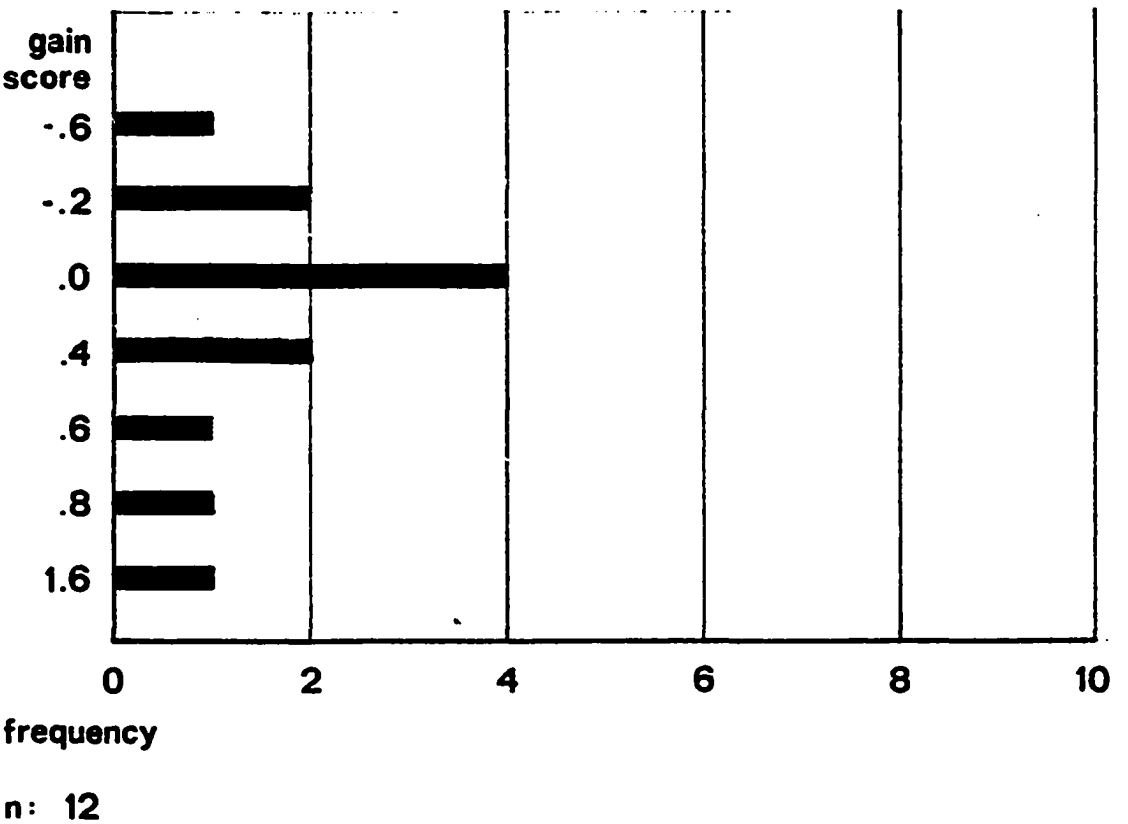
Graph 5. Attitude study gain score frequencies at Iowa Central Community College at Fort Dodge (Area V)



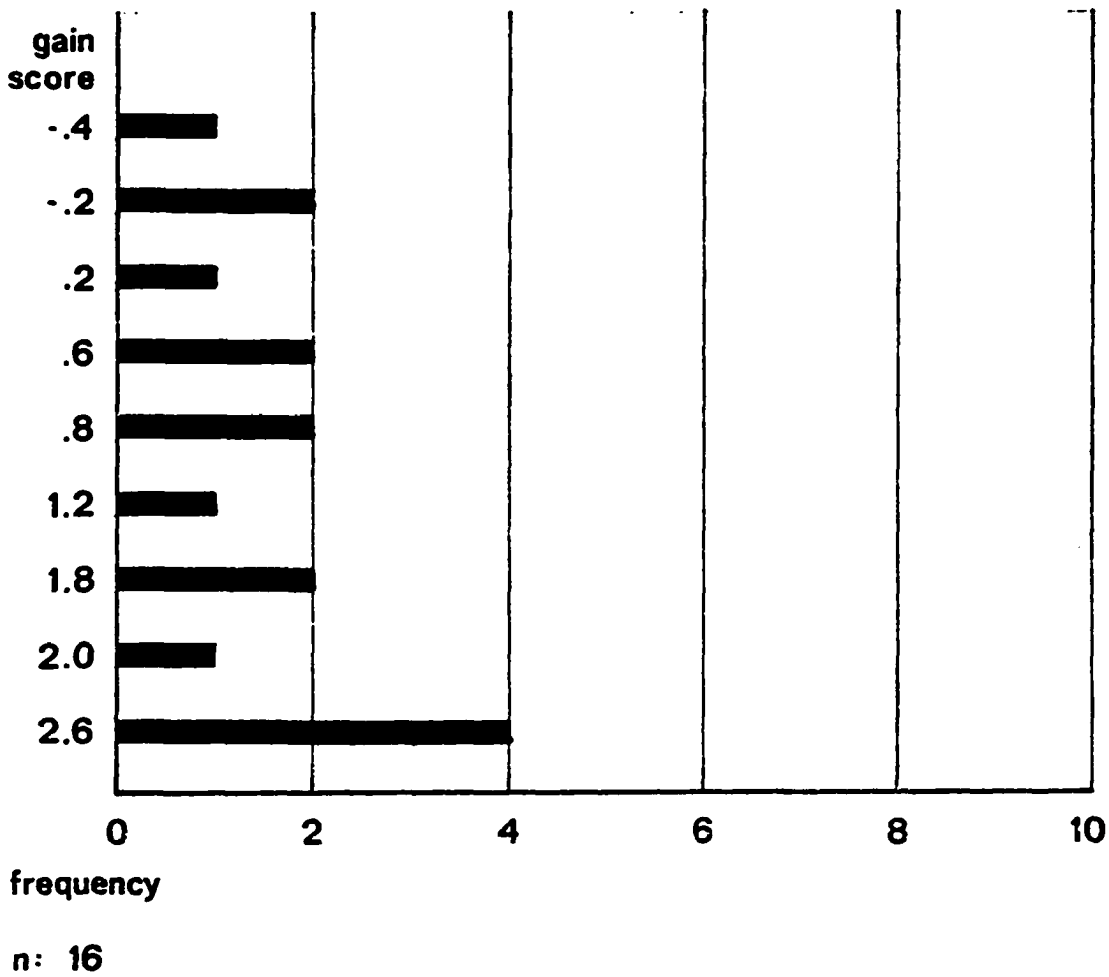
Graph 6. Attitude study gain score frequencies at Hawkeye Institute of Technology at Waterloo (Area VII)



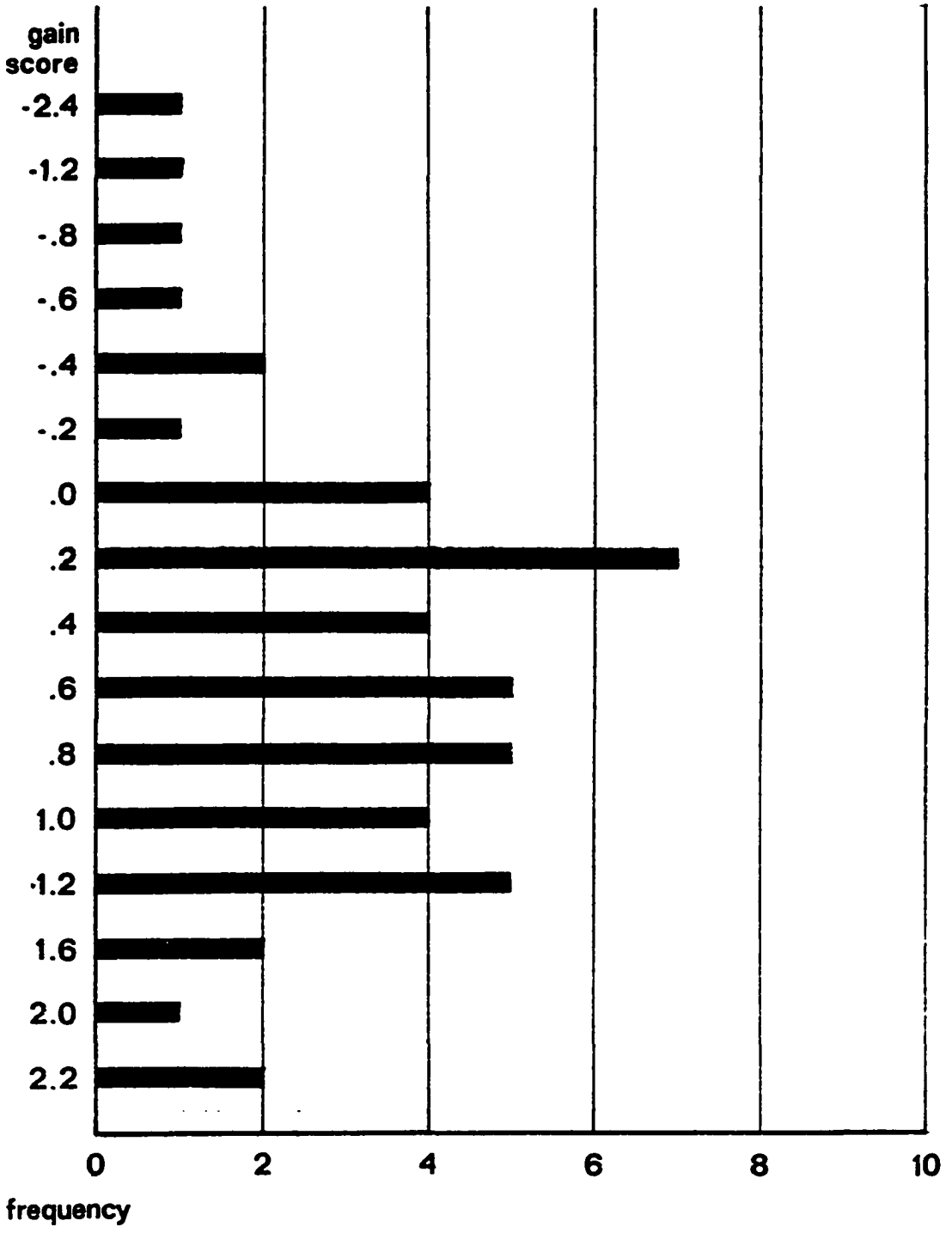
Graph 7. Attitude study gain score frequencies at Eastern Iowa Community College District at Clinton (Area IX)



Graph 8. Attitude study gain score frequencies at Eastern Iowa Community College District at Muscatine (Area IX)

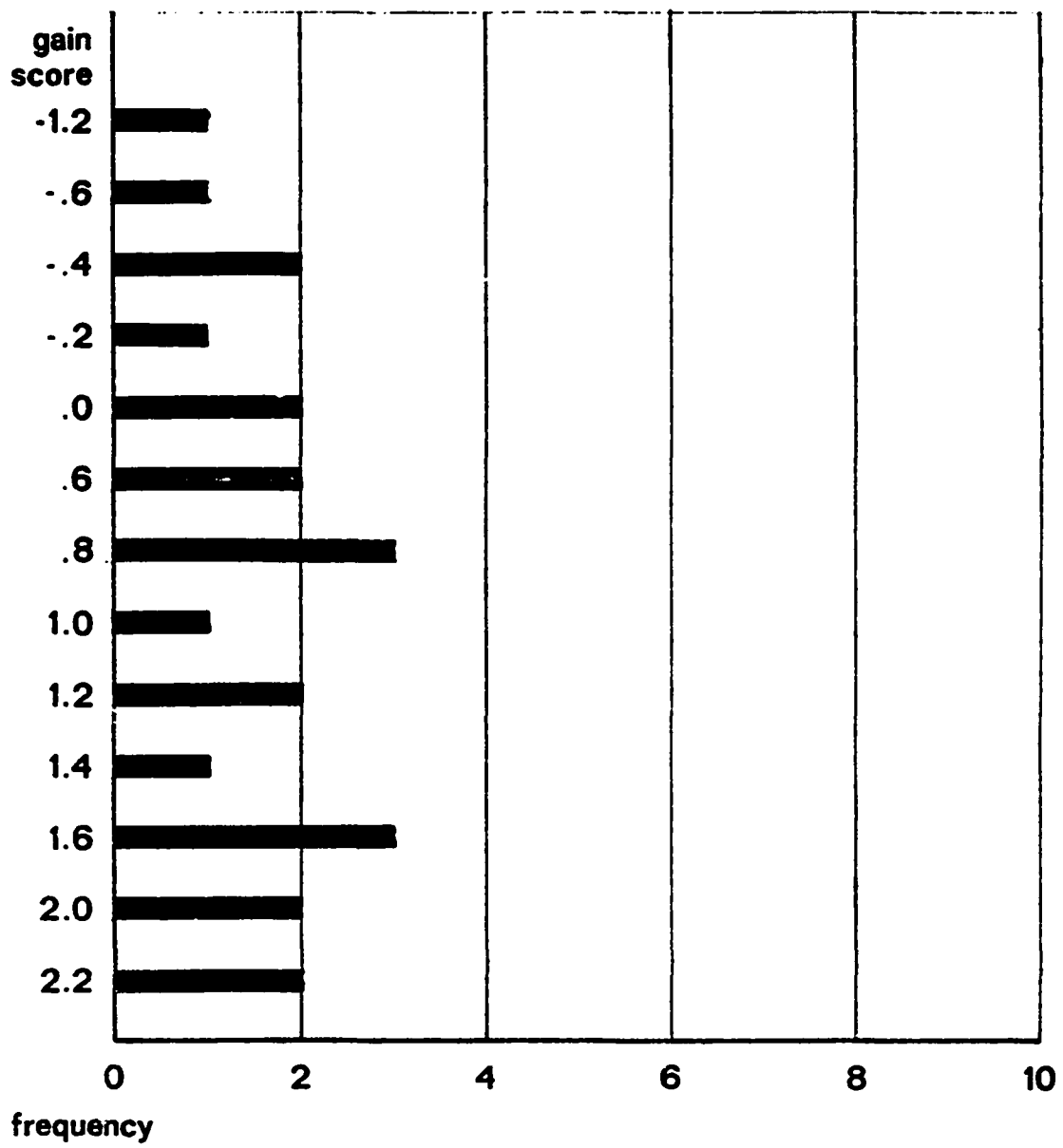


Graph 9. Attitude study gain score frequencies at Kirkwood Community College at Cedar Rapids (Area X)

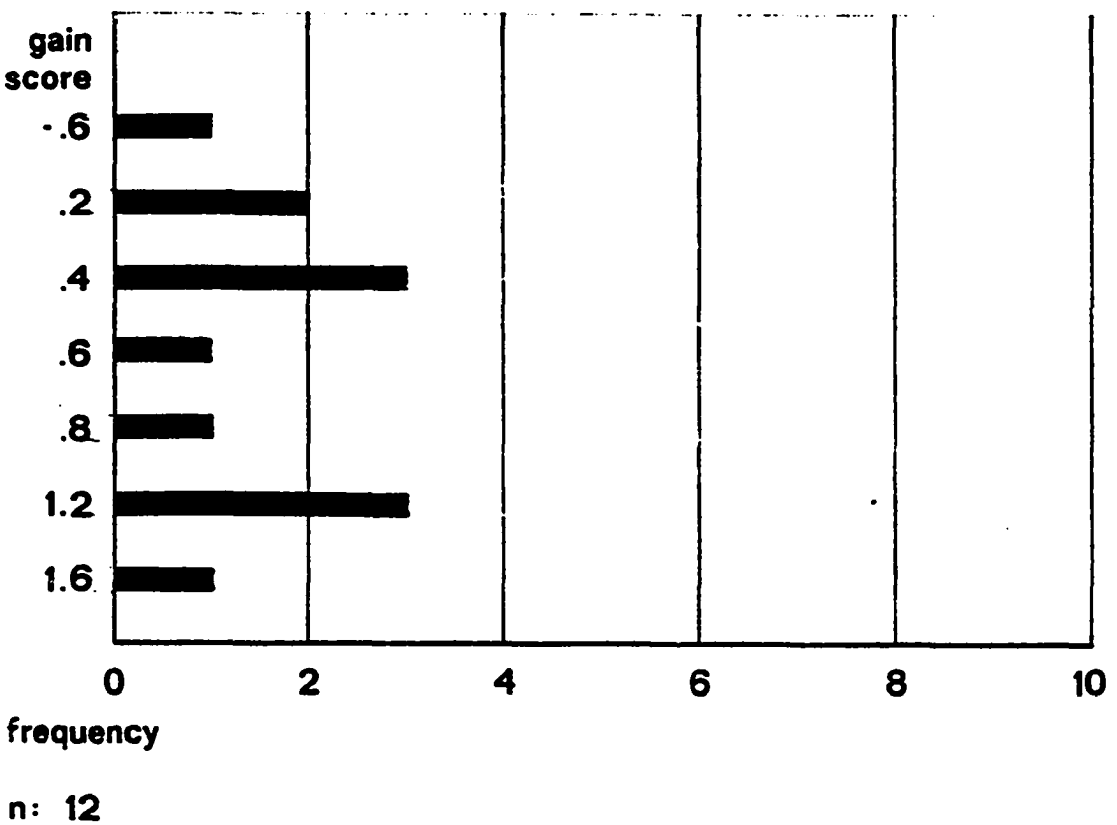


n: 46

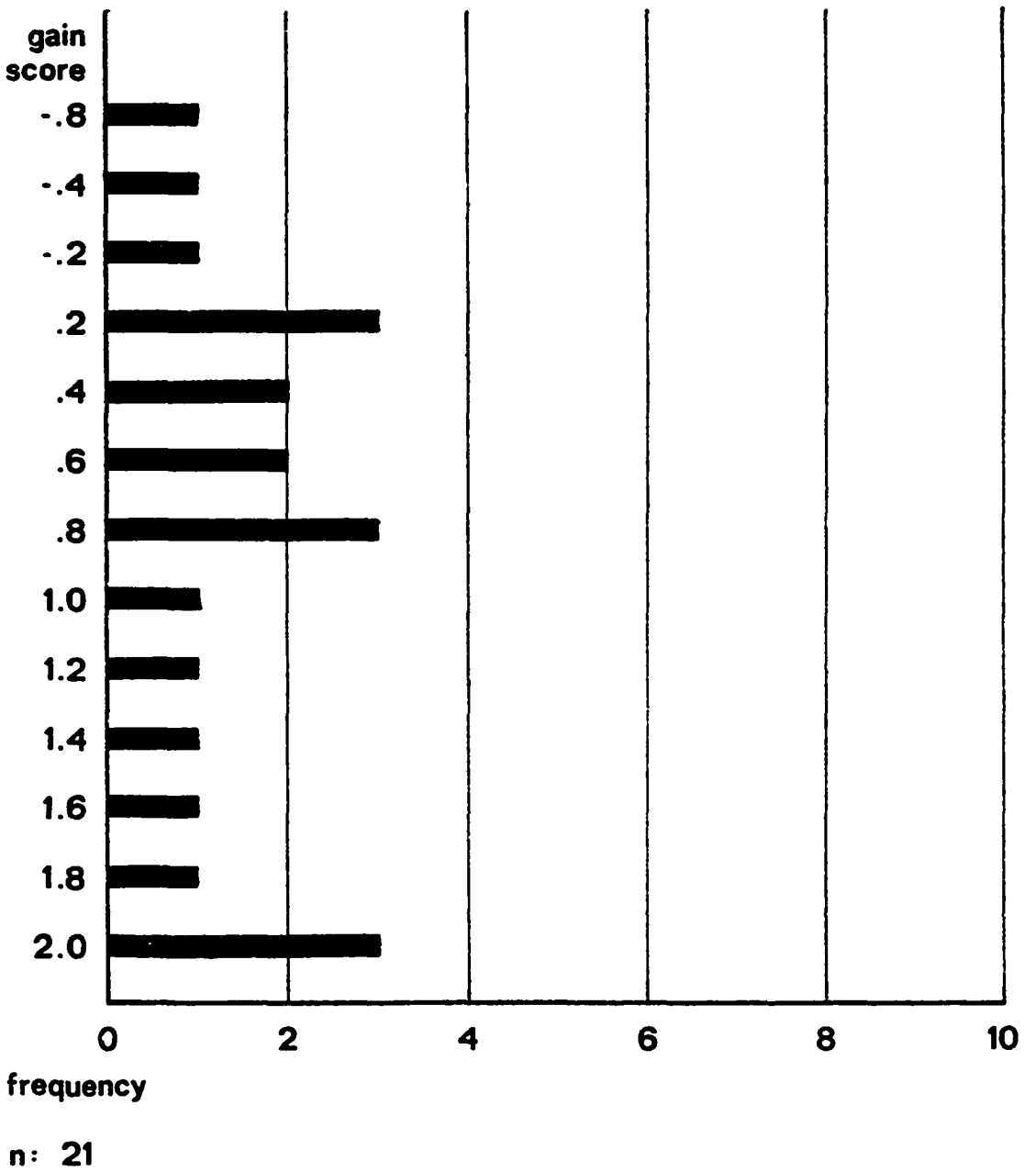
Graph 10. Attitude study gain score frequencies at Des Moines Area Community College at Ankeny, Teacher I (Area XI)



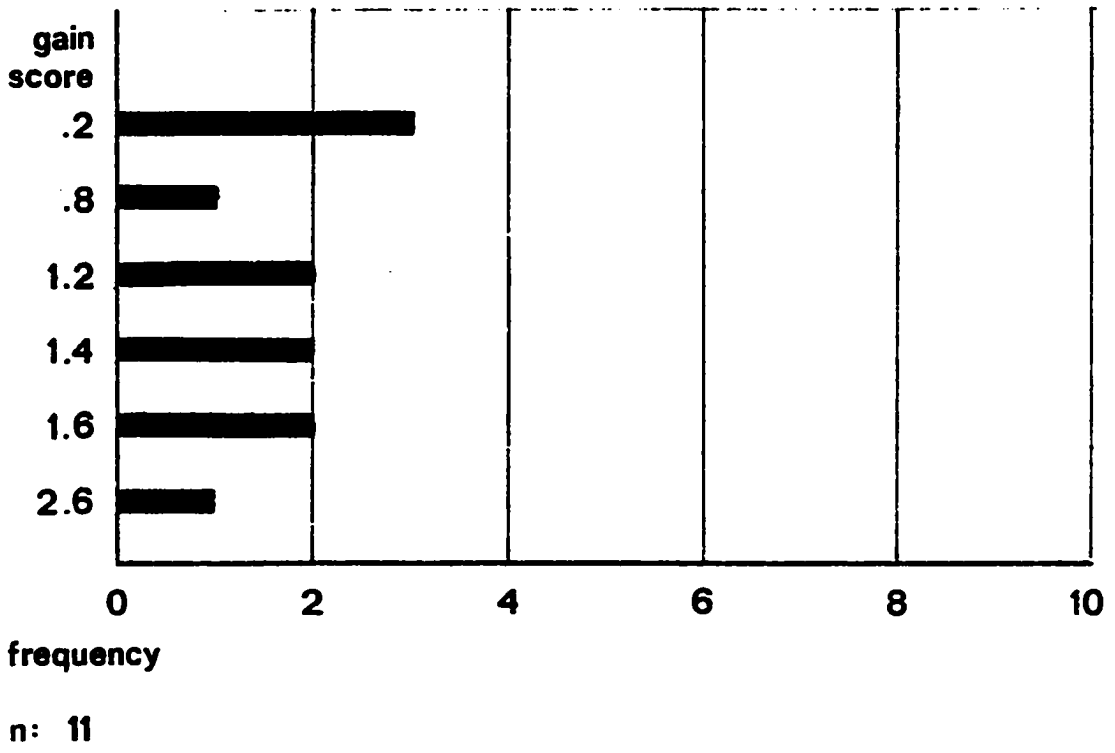
Graph 11. Attitude study gain score frequencies at Des Moines Area Community College at Ankeny, Teacher II (Area XI)



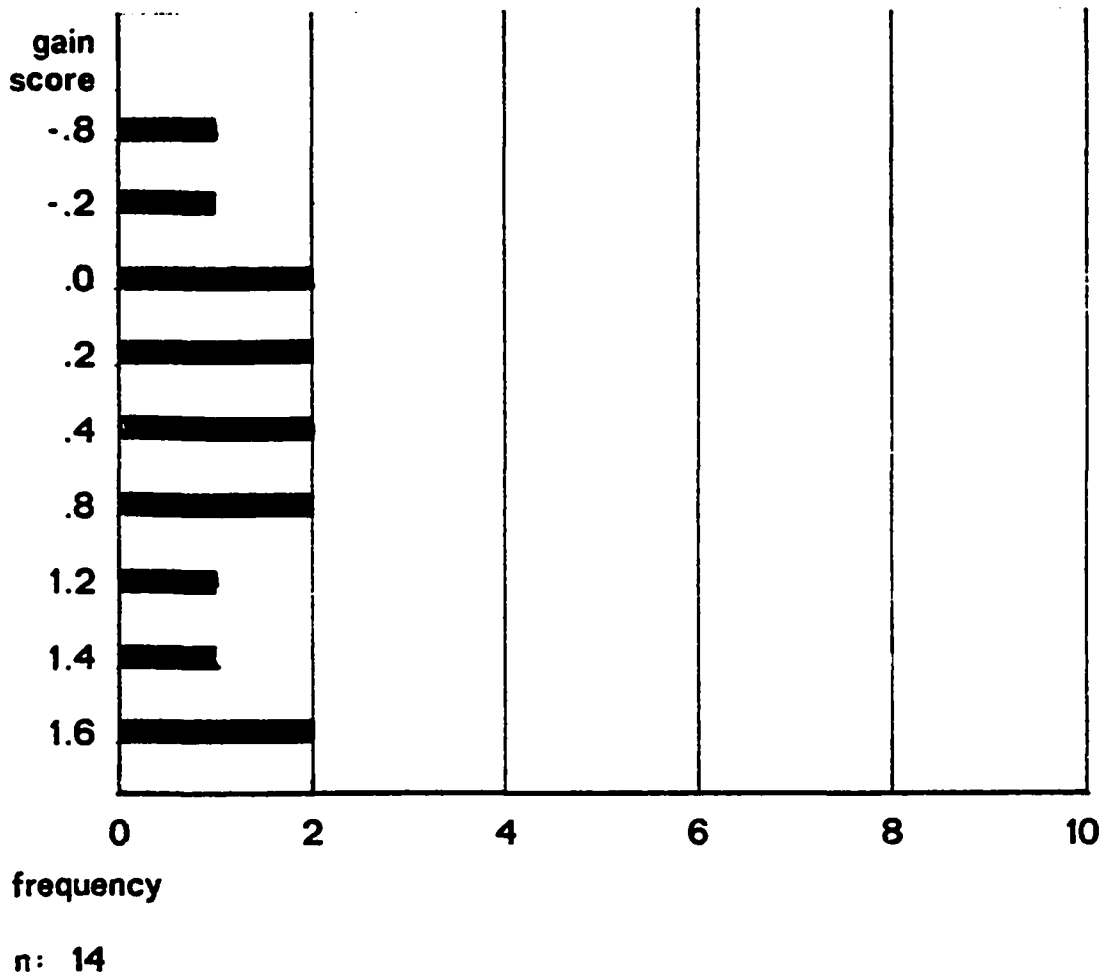
Graph 12. Attitude study gain score frequencies at Des Moines Area Community College at Ankeny, Teacher III (Area XI)



Graph 13. Attitude study gain score frequencies at Iowa Western College at Council Bluffs (Area XIII)



Graph 14. Attitude study gain score frequencies at Southwestern Community College at Creston (Area XIV)



Graph 15. Attitude study gain score frequencies at Indian Hills Community College at Ottumwa (Area XV)

APPENDIX G: FEASIBILITY AND EFFECTIVENESS INTERVIEW FORMS

Feasibility Interview Form for Representatives of the Adult Education and Area School Divisions of DPI:

Note: All the following questions refer to studies carried out on recidivism, student attitudes and judges, completed student, teacher and coordinator surveys.

1. Would your division have funds available to implement this model, including funds for salaries, computer time, printing, postage and travel?

2. Is the model organized so that your division would be able to implement and complete it in a reasonable time, without original data becoming outdated or irrelevant?

3. Would members of your staff have time to implement the model without having unreasonable demands made on their time?

4. Is the information requested by the model available to staff members?

5. Would staff members have the expertise to gather and analyze data as requested in the model?

Additional comments:

Effectiveness Interview Form for Representatives of the Adult Education and Area School Divisions of DPI, State Legislators, the Highway Traffic Safety Division of DPS, and the Supreme Court Administrator:

Note: All of the following questions refer to studies carried out on recidivism, student attitudes, and judges, completed students, teacher and coordinator surveys.

1. Was information regarding inputs to the course accurate, complete, and relevant in the following categories:

   Compliance:

   Feedback:

   Local Variations:

2. Was information regarding process within the course accurate, complete, and relevant in the following categories:

   Compliance:

   Feedback:

   Local Variations:

3. Was information regarding products from the course accurate, complete, and relevant in the following categories:

   Compliance:

   Feedback:

   Local Variations: